Iowa Department of Natural Resources Title V Operating Permit

Name of Permitted Facility: Linwood Mining & Minerals

Corporation

Facility Location: 401 East Front Street

Davenport, Iowa 52804

Air Quality Operating Permit Number: 04-TV-005R2

Expiration Date: September 2, 2024

Permit Renewal Application Deadline: March 2, 2024

EIQ Number: 92-3207

Facility File Number: 82-01-015

Responsible Official

Name: Jonathan Wilmshurst

Title: President

Mailing Address: 401 East Front Street

Davenport, Iowa 52804

Phone #: 563-324-1931

Email: jwilmshurst@linwoodmining.com

Permit Contact Person for the Facility

Name: Darin Osland

Title: Environmental Manager Mailing Address: 401 East Front Street

Davenport, Iowa 52804

Phone #: 563-324-1931, ex. 1140

Email: dosland@linwoodmining.com

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Lori Hanson, Supervisor of Air Operating Permits Section Date

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	control equipment					
	continuous emission monitor					
	degrees Fahrenheit					
	emissions inventory questionnaire					
	emission point					
	emission unit					
	grains per dry standard cubic foot					
	Iowa Administrative Code					
	Iowa Department of Natural Resources					
	Lime Manufacturing Plant					
	motor vehicle air conditioner					
	North American Industry Classification System					
	new source performance standard					
	parts per million by volume					
	pounds per hour					
	pounds per million British thermal units					
	Source Classification Codes					
scfm	standard cubic feet per minute					
	Standard Industrial Classification					
	tons per year					
USEPA	United States Environmental Protection Agency					
Pollutants						
PM	particulate matter					
PM ₁₀	particulate matter ten microns or less in diameter					
	sulfur dioxide					
NO _x	nitrogen oxides					
	volatile organic compound					
	carbon monoxide					
HAP	hazardous air pollutant					

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I. Facility Description and Equipment List

Facility Name: Linwood Mining and Minerals Corporation

Permit Number: 04-TV-005R2

Facility Description: Crushed and Broken Limestone (SIC 1422)

Equipment List

Emission	Emission Unit	Emission Unit Description	IDNR	
Point	Number	_	Construction	
Number			Permit Number	
BL01	BL01	East Barge Loadout	02-A-168-S2	
BL02	BL02	West Barge Loadout	02-A-169-S2	
	CC-1a	Old Mill (Dryer)		
	CC-1b	Old Mill (Cage Mill)		
	CC-1c	Old Mill (Screen)		
	CC-1d	Old Mill (Screen)		
	CC-1e	Old Mill (Separator)		
	CC-1f	Old Mill (Separator)		
	CC-1g	Old Mill (Conveyors/Screws/Elevators)		
CC-1	CC-1h	Old Mill (Finished Storage Tank)	71 4 094 810	
CC-1	CC-1i	Old Mill (Finished Storage Tank)	71-A-084-S10	
	CC-1j	Storage Bin		
	CC-1k	Storage Bin		
	CC-11	Storage Bin		
	CC-1m	Storage Bin		
	CC-13	South Tank		
	CC-12 North Tank			
	CC-1r	#3 Loadout System		
	CC-2b	New Mill (Hammermill 1)		
	CC-2c	New Mill (Hammermill 2)		
	CC-2d	New Mill (Separator 18')		
	CC-2e	New Mill (Screen)	86-A-049-S9	
CC-2	CC-2f	New Mill (Screen)		
	CC-2g	New Mill (Screen)		
	CC-2h	New Mill (Screen)		
	CC-2i	New Mill (Raymond Mill)		
	CC-2k	New Mill (Conveyors/Screws/Elevators)		
	CC-3	Calcium Railcar Loadout		
CC-3	CC-3A	North/South Belt	88-A-218-S6	
CC-3	CC-3B East/West Belt	88-A-218-S0		
	CC-3C	Calcium Truck Loadout		
CC-5	CC-2a	New Mill (Dryer)	98-A-846-S2	
CC-5	CC-2k	New Mill (Conveyors/Screws/Elevators)	98-A-840-S2	
CC 16	CC-16	Long Conveyor	17-A-488	
CC-16	CC-17	Granular Bin #1	1/-A-488	

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
	CC-18	Granular Bin #2	
HR-U	HR-U	Unpaved Haul Roads	18-A-108-S1
HR-P	HR-P	Paved Haul Roads	18-A-109-S1
	Pile 2	Pile 2	
	Pile 3	Pile 3	
	Pile 5	Pile 5	
	Pile 10	Pile 10	
Storage	Pile 12	Pile 12	18-A-110
Piles	Pile 13	Pile 13	18-A-110
	Pile 15	Pile 15	
	Pile 16	Pile 16	
	Pile 17	Pile 17	
	Pile 18	Pile 18	
	Q11C-1	Feed Conveyor	
	Q11C-2	Screener	
	Q11C-3	Overs Conveyor	
Q11C	Q11C-4	Unders Conveyor	18-A-111-S1
	Q11C-5	Weigh Conveyor	
	Q11C-6	Stacker	
	Pile 1	Pile 1	
	LP-Kiln#1	Dry Rotating Lime Kiln	
	LP-Kiln#2	Dry Rotating Lime Kiln	
	LP-Kiln#3	Preheater Lime Kiln	
LP-4	LP-Kiln#4	Preheater Lime Kiln	72 4 210 57
LP-4	LP-41	Elevator 431	73-A-219-S7
	LP-42	Conveyor 446	
	LP-50	West Kiln Run Tank 442	
	LP-51	East Kiln Run Tank 443	
LP-7	LP-7	Kiln Dust Tank and Loadout	88-A-220-S5
	LP-8a	Tank 445	
	LP-8b	Tank 446	
	LP-8c	Tank 447	
	LP-8d	Crusher	
LP-8	LP-8e	Screen	88-A-221-S9
LP-8	LP-8f	8f Briquetter	66-A-221-39
	LP-8g	Pneumatic Blower	
	LP-8h	Tank 441	
	LP-8i	Scale #1 Loadout System	
	LP-8j	Tank 446B	
LP-9	K-1, K-2, K-3, K-4	Four (4) Rotary Lime Kilns	91-A-324-S6
	LP-12a	Hi-Cal Storage Bin	
I D 10	LP-12b	Pneumatic Blower	07 + 100 + 5 +
LP-12	LP-12c	Hi-Cal Storage Bin	97-A-1084-S4
	LP-12e	Flourspar Storage Bin	

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Emission Point	Emission Unit Number	Emission Unit Description	IDNR Construction	
Number	Number		Permit Number	
Number	LP-12f	Cal-Aluminate Storage Bin	Perint Number	
	LP-12g	Hi-Cal Storage Bin		
	LP-12g	Lime Rail Loadout System (Spout and Belt #1)		
	LP-13A	Lime Rail Loading Conveyor		
	LP-13B	Tank 445 Rail Conveyor		
LP-13	LP-13C	Tank 446 Rail Conveyor	02-A-028-S5	
	LP-13D	Tank 446 Rail Conveyor	_	
	LP-13E	Dolo to Rail Loadout Conveyor	_	
	LP-6	Dolo Process Loading Spout		
	LP-16B	Dolo Process Bins	_	
LP-16	LP-16C	Dolo Process Conveying	11-A-335-S3	
	LP-16S	Dolo Process Screener and Crusher		
	LP-17	Dolo Truck Loading Spout		
	LP-17-1	Dolo Loadout Conveyor #1		
	LP-17-2	Dolo Loadout Conveyor #1 Dolo Loadout Conveyor #2		
LP-17	LP-17-4	Bathtub Bins (5 total)	11-A-336-S3	
	LP-1Q	C352 Dolo Belt to Loadout		
	LP-1Q LP-1R			
Calid Fuel	LP-IR	C353 Dolo Drag Conveyor		
Solid Fuel- 01	Solid Fuel-01	Solid Fuel Pile	17-A-504-S1	
LP-20	LP-20	Solid Fuel Hopper	17-A-495-S1	
LP-39	LP-39	Solid Fuel Crusher	17-A-505-S2	
LF-39	LP-39A	Crusher Burner	17-A-303-32	
LP-24	LP-21	Kilns Solid Fuel Conveyor	17-A-494-S1	
L1 -24	LP-25	Kilns Solid Fuel Tank	17-134-51	
LP-36	LP-36	Kiln # 3 Rockbox Conveyor	17-A-491	
L1 -30	LP-37	Kiln # 3 Rockbox	17-71-471	
	LP-38	Kiln #1, 2 Rockbox Conveyor		
LP-38	LP-52	Kiln #1 Rockbox	17-A-492	
	LP-40	Kiln #2 Rockbox		
	Q-1	Primary Crushing		
Q-1	Q1C1	Conveyor 1	11-A-337-S1	
	Q1C2	Conveyor 2		
	LP1 Belt			
	LP1 Screen			
	LP1 Crusher			
	LP6 Belt			
	LP9 Belt			
0.21.0	I P4A Relt	Secondam Couching/Secondary I Di	10 4 110 01	
Q-2LP	LP2 Screen	Secondary Crushing/Screening – Lower Plant	18-A-112-S1	
	LP4 Stacker	1		
	LP3 Stacker			
	LP5 Stacker	1		
	LP8 Stacker			
	Pile 7 (In pit)	-		
	1 110 / (III pit)	<u> </u>		

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Emission	Emission Unit	Emission Unit Description	IDNR
Point	Number	_	Construction
Number			Permit Number
	TP1a	TP1a Belt	
	TP1b	TP1b Belt	
	TP2	TP2 Belt	
	TP1 N	TP1 N Screen	
	TP1 S	TP1 S Screen	
	TP3	TP3 Crusher Belt	
	TP1	TP1 Crusher	
	TP4	TP4 Crusher Return Belt	
	TP6	TP6 Cross Belt	
	TP8	TP8 Belt	
	TP3	TP3 West Screen	
Q-2TP	TP4	TP4 East Screen	18-A-113
	TP9	TP9 Belt	
	TP11	TP11 Belt	
	TP14	TP14 Belt Washer	
	TP12	TP12 Belt	
	TP17	TP17 Belt	
	TP6	TP6 PEP Screen	
	TP5	TP5 Sugarbeet Stacker	†
	TP16	TP16 Belt Stacker (wet material processed)	
	TP18	TP18 Stacker (wet material processed)	
	TP19	TP19 Stacker (wet material processed)	
	Pile 4	Pile 4	
Pile 1 & 11	Pile 1 & 11	Storage Pile 1 & 11	18-A-114
Pile 8	Pile 8	Material Storage Pile 8	18-A-115
Pile 14	Pile 14	Material Storage Pile 14	18-A-116
		Material Storage Pile A (Includes Piles Barge, B,	
Pile A	Pile A	E, H)	18-A-117-S1
	Q-03E	Q-03E Crusher	
	Q-03F	Q-03F Belt	
	Q-03G	Q-03G Stacker	
	Q-03H	Q-03H Belt	02-A-017-S3
	Q-03I	Q-03I Screen WET	
Q-3P	Q-03J	Q-03J Stacker	
	Q-03B	Q-03B Belt	
	Q-03C	Q-03C Belt	
	Q-03D	Q-03D Screen	
	Pile 9	Pile 9 (In pit)	
EM Engine	EM Engine	Kilns Emergency Engine	NA
Livi Liigiile	Livi Eligilie	Kinis Emergency Engine	11/1

Insignificant Activities Equipment List

Insignificant	Insignificant Emission Unit Description
Emission Unit	
Number	
GS LP	Gasoline Storage LP 1000 gal
DS LP	Diesel Storage LP 1000 gal
DS Q1	Quarry 1 Diesel 9700 gal
DS Q2	Quarry 2 Diesel 12,500 gal
DS Q3	Quarry 3 Diesel 1000 gal 0.2
DS M1	Diesel Mine Bio 12,000 gal
DS M2	Diesel Mine 2 - 1750 gal
ISH	Maintenance Shop 0.4 MMBtu

II. Plant-Wide Conditions

Facility Name: Linwood Mining & Mineral Corporation

Permit Number: 04-TV-005R2

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: 5 years

Commencing on: 9/2/2024 Ending on: 9/2/2024

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity

Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO₂): 500 parts per million by volume

Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed on or after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B). Authority for Requirement: 567 IAC 23.3(2)"a"

<u>Fugitive Dust:</u> Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to

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be used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

- 1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
- 2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
- 3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizer or limestone.
- 4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
- 5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
- 6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

Authority for Requirement: 567 IAC 23.3(2)"c"

40 CFR 60 – Subpart A

The Permittee shall comply with the applicable requirements of 40 CFR 60 Subpart A – General Provisions for all sources subject to 40 CFR Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants and 40 CFR 60 Subpart HH – Standards of Performance for Lime Manufacturing Plants. Excerpts of the Subpart A Requirements are shown below and are provided for reference only:

Sec. 60.12 Circumvention.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission, which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard, which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

Sec. 60.14 Modification.

(a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

Sec. 60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

Authority for Requirement: 40 CFR 60 Subpart A – General Provisions

567 IAC 23.1(2)

Administrative Consent Order NO. 98-AQ-7

The requirements of Administrative Consent Order (ACO) 98-AQ-7 are included in Iowa's federally approved State Implementation Plan (SIP). While a subsequent ACO, 2002-AQ-10, superseded and replaced the 98-AQ-7 ACO, the 2002-AQ-10 ACO was never submitted for inclusion in the SIP and the 98-AQ-7 ACO was never submitted for removal from the SIP. As such, although Iowa rescinded the 2002-AQ-10 ACO on April 19, 2019, the requirements of ACO 98-AQ-7 remain in the SIP. The DNR has incorporated the still-relevant requirements of these ACOs into current construction permits. The DNR will request that those construction permits be included in Iowa's federally approved SIP and that ACO 98-AQ-7 be removed. This operating permit includes requirements from the current construction permits and the 98-AQ-7 ACO. However, no action will be required on the part of the permittee to remove the 98-AQ-7 ACO's requirements from this operating permit subsequent to and conditioned upon EPA's final action removing ACO 98-AQ-7 from the Iowa SIP.

See Appendix A for further information.

III. Emission Point-Specific Conditions

Facility Name: Linwood Mining & Mineral Corporation

Permit Number: 04-TV-005R2

Emission Point ID Number: BL01

Associated Equipment

Associated Emission Unit ID Numbers: BL01 Emissions Control Equipment ID Number: BL01

Emissions Control Equipment Description: Windscreen and Water Suppression

Emission Unit vented through this Emission Point: BL01

Emission Unit Description: East Barge Loadout

Raw Material/Fuel: Limestone Rated Capacity: 400 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity-Conveyor Stacker

Emission Limit(s): 10% (1)

(1) Limit established per Table 3 of Subpart OOO Part 60

Authority for Requirement: DNR Construction Permit 02-A-168-S2

40 CFR Subpart OOO 567 IAC 23.1(2)"bbb" (2)

⁽²⁾ IAC reference to NSPS Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants; 40 CFR §60.670 – 40 CFR §60.676).

Pollutant: PM-10

Emission Limit(s): 0.105 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-168-S2

Pollutant: PM

Emission Limit(s): 0.2 lb/hr ⁽⁴⁾, 0.1 gr/dscf ⁽⁴⁾ PM emissions limit was added to restrict PTE.

Authority for Requirement: 567 IAC 23.3(2)"a"

DNR Construction Permit 02-A-168-S2

Pollutant: Fugitive Dust

Emission Limit: See Plant-Wide Conditions.

Authority for Requirement: See Plant-Wide Conditions.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS

The facility is subject to the New Source Performance Standard (NSPS), Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants and the conveyor stacker is subject to Subpart OOO per 40 CFR §60.670 – 40 CFR §60.676.

Authority for Requirement: DNR Construction Permit 02-A-168-S2

40 CFR 60 Subpart A – 567 IAC 23.1(2)

40 CFR 60 Subpart OOO – 567 IAC 23.1(2)"bbb"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum combined throughput of emission units BL01 and BL02 shall not exceed 8,500 tons per calendar day.
 - i. The owner or operator shall maintain records of the total throughput of BL01 and BL02 for each calendar day in tons.
- B. Emission units BL01 and BL02 shall operate only between March 1 and December 31.
- C. Emission units BL01 and BL02 shall not operate more than 6 days per calendar week and between hours of 6 am and 9 pm for each calendar day.
 - i. The owner or operator shall maintain records detailing the date and operation times (start and stop) for BL01 and BL02.
- D. The owner or operator shall operate water suppression system when visible emissions from processing units associated with East barge Loadout are observed.
- E. The owner or operator shall check for visible emissions each time the East barge loadout is used. This requirement shall not apply on the days that processing units associated with East barge Loadout are not in operation.
 - i. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions.
 - ii. If the owner or operator observes visible emissions during barge loading, the owner or operator shall investigate the emission unit, or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken.

- F. The owner or operator shall develop an operating and maintenance plan for the water suppression system, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the water suppression system.
- G. The owner or operator shall install the water suppression system on East barge loadout and West barge loadout by October 1, 2018.
 - The owner or operator shall maintain a record of the completion date that the water suppression was installed on site.

Authority for Requirement: DNR Construction Permit 02-A-168-S2

Monitoring	Requi	rements

Monitoring Requirements The owner/operator of this equipment shall comply with the monitoring below.	requirements listed
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🖂 No 🗌
Relevant requirements of O & M plan for this equipment: PM ₁₀ and Pa	articulate Matter
Facility operation and maintenance plans must be sufficient to yield relevant time period that are representative of the source's compliance requirements.	v
Facility operation and maintenance plans are to be developed by the fa of the issuance date of this permit and the data pertaining to the plan m least 5 years. The plan and associated recordkeeping provides docume implementation of its obligation to operate according to good air pollu	naintained on site for at entation of this facility's
Good air pollution control practice is achieved by adoption of quality coperation and maintenance procedures for air pollution control that arquality control standards for the production processes associated with	e comparable to industry
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
Authority for Requirement: 567 IAC 22.108(3)	

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Emission Point ID Number: BL02

Associated Equipment

Associated Emission Unit ID Numbers: BL02

Emissions Control Equipment ID Number: CE BL02

Emissions Control Equipment Description: Windscreen and Water Suppression

Emission Unit vented through this Emission Point: BL02

Emission Unit Description: West Barge Loadout

Raw Material/Fuel: Limestone Rated Capacity: 650 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity-Conveyor Stacker

Emission Limit(s): 10% (1)

(1) Limit established per Table 3 of Subpart OOO Part 60

Authority for Requirement: DNR Construction Permit 02-A-169-S2

40 CFR Subpart OOO 567 IAC 23.1(2)"bbb" (2)

⁽²⁾ IAC reference to NSPS Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants; 40 CFR §60.670 – 40 CFR §60.676).

Pollutant: PM-10

Emission Limit(s): 0.17 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-169-S2

Pollutant: PM

Emission Limit(s): 0.325 lb/hr, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

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Pollutant: Fugitive Dust

Emission Limit: See Plant-Wide Conditions.

Authority for Requirement: See Plant-Wide Conditions.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS

The facility is subject to the New Source Performance Standard (NSPS), Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants. The conveyor stacker is subject to Subpart OOO per 40 CFR §60.670 – 40 CFR §60.676.

Authority for Requirement: DNR Construction Permit 02-A-169-S2

40 CFR 60 Subpart A – 567 IAC 23.1(2)

40 CFR 60 Subpart OOO - 567 IAC 23.1(2)"bbb"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum combined throughput of emission units BL01 and BL02 shall not exceed 8,500 tons per calendar day.
 - i. The owner or operator shall maintain records of the total throughput of BL01 and BL02 for each calendar day in tons.
- B. Emission units BL01 and BL02 shall operate only between March 1 and December 31.
- C. Emission units BL01 and BL02 shall not operate more than 6 days per calendar week and between hours of 6 am and 9 pm for each calendar day.
 - i. The owner or operator shall maintain records detailing the date and operation times (start and stop) for BL01 and BL02.
- D. The owner or operator shall operate water suppression system when visible emissions from processing units associated with West barge Loadout are observed.
- E. The owner or operator shall check for visible emissions each time the West barge loadout is used. This requirement shall not apply on the days that processing units associated with West barge Loadout are not in operation.
 - i. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions.
 - ii. If the owner or operator observes visible emissions during barge loading, the owner or operator shall investigate the emission unit, or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken.
- F. The owner or operator shall develop an operating and maintenance plan for the water suppression system, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

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- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the water suppression system.
- G. The owner or operator shall install the water suppression system on East barge loadout and West barge loadout by October 1, 2018.
 - i. The owner or operator shall maintain a record of the completion date that the water suppression was installed on site.

Authority for Requirement: DNR Construction Permit 02-A-169-S2

Monitoring Requirements The owner/operator of this equipment shall comply with the monitoring redbelow.	quirements listed
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Relevant requirements of O & M plan for this equipment: PM_{10} and $Particle$	culate Matter
Facility operation and maintenance plans must be sufficient to yield reliable relevant time period that are representative of the source's compliance with requirements.	•
Facility operation and maintenance plans are to be developed by the facility of the issuance date of this permit and the data pertaining to the plan main least 5 years. The plan and associated recordkeeping provides documental implementation of its obligation to operate according to good air pollution.	tained on site for at tion of this facility's
Good air pollution control practice is achieved by adoption of quality control operation and maintenance procedures for air pollution control that are equality control standards for the production processes associated with this	omparable to industry
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
Authority for Requirement: 567 IAC 22.108(3)	

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Emission Point ID Number: CC-1

Associated Equipment

Associated Emission Unit ID Numbers: Old Mill (See complete emission unit list in Table 1:

Old Mill Units)

Emissions Control Equipment ID Number: CE CC-1 Emissions Control Equipment Description: Baghouse

Raw Material/Fuel: Limestone

Table 1: Old Mill Units

The following emission units vent to the control equipment (CE CC-1) and out the emission point (EP CC-1):

Emission Unit	Rated Capacity
Old Mill Dryer (EU CC-1a)	40 tons/hr
Old Mill Cage Mill (EU CC-1b)	40 tons/hr
Old Mill Screen (EU CC-1c)	60 tons/hr
Old Mill Screen (EU CC-1d)	60 tons/hr
Old Mill Separator 1 (EU CC-1e)	40 tons/hr
Old Mill Separator 2 (EU CC-1f)	30 tons/hr
Old Mill Conveyors/Screws/Elevators (EU CC-1g)	
includes Transfer Point CL-1 From Tank and Transfer	60 tons/hr
Point CL-1 to Elevator	
Old Mill Finished Storage Tank (EU CC-1h)	1200 tons
Old Mill Finished Storage Tank (EU CC-1i)	1200 tons
Storage Bin (EU CC-1j)	138 tons
Storage Bin (EU CC-1k)	138 tons
Storage Bin (EU CC-11)	138 tons
Storage Bin (EU CC-1m)	138 tons
South Tank (CC-13)	175 tons
North Tank (CC-12)	400 tons
#3 Loadout System (EU CC-1r) includes a pneumatic conveyor (60 TPH), an enclosed belt conveyor (60 TPH), two load out spouts, and a scale.	120 tons/hr
1111), two load out spouts, and a scale.	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 2.48 lb/hr

Authority for Requirement: DNR Construction Permit 71-A-084-S10

Pollutant: Particulate Matter (Federal) Emission Limit(s): 0.032 g/dscm (2)

Authority for Requirement: DNR Construction Permit 71-A-084-S10

567 IAC 23.1(2)"bbb" ⁽³⁾

Pollutant: Particulate Matter (State)

Emission Limit(s): 2.48 lb/hr

Authority for Requirement: DNR Construction Permit 71-A-084-S10

Pollutant: Sulfur Dioxide (SO₂) Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 71-A-084-S10

567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS

These emission units are subject to NSPS Subparts A (*General Provisions*; 40 CFR §60.1 – 40 CFR §60.19) and OOO (*Standards of Performance for Nonmetallic Mineral Processing Plants*; 40 CFR §60.670 – 40 CFR §60.676).

Operating Limits

Operating limits for this emission unit shall be:

- A. The fuel combusted in the Old Mill Dryer (EU CC-1a) is limited to either natural gas or landfill gas.
- B. The facility shall operate only one of the following conveying systems, which are associated with #3 Loadout System (EU CC-1r), at a time:
 - Pneumatic conveyor
 - Fully enclosed belt conveyor
- C. The owner or operator shall conduct visible emissions observation (Method 22) on emission units associated with #3 Loadout System (EU CC-1r) once per calendar week.
- D. The owner or operator shall maintain the control equipment according to manufacturer's specifications and maintenance schedule.

 $^{^{(2)}}$ 0.032 grams per dry standard cubic meter (g/dscm) = 0.014 grains per dry standard cubic foot (gr/dscf). Limit established per 40 CFR $\S60.672(a)$.

⁽³⁾ IAC reference to NSPS Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants; 40 CFR §60.670 – 40 CFR §60.676).

Operating Condition Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. A record of all inspections/maintenance activities and any action resulting from the inspection/maintenance of the control equipment.
- B. Owner/operator shall implement written procedures onsite to ensure only one conveyor system is operated. These procedures shall be retained onsite and made available for inspection.
- C. If the owner or operator observes visible emissions from emission units associated with #3 Loadout System (EU CC-1r), the owner or operator shall investigate the emission units, control equipment or operations associated with EU CC-1r and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that emission units, control equipment or operations associated with EU CC-1r are not in operation.
- D. Per 40 CFR §60.676(b), the results of each Method 22 test, including the date and any corrective actions taken.

Authority for Requirement: DNR Construction Permit 71-A-084-S10

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 72

Stack Opening (inches, dia): 42 Exhaust Flow Rate (scfm): 34,800 Exhaust Temperature (°F): 150

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 71-A-084-S10

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements	
The owner/operator of this equipment shall comply with the monitoring re-	equirements listed
below.	
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
(See Operational Limits & Requirements for equivalent CAM language)	

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: CC-2

Associated Equipment

Associated Emission Unit ID Numbers: CC-2b through CC-2k

Emissions Control Equipment ID Number: CE CC-2 Emissions Control Equipment Description: Baghouse

Table 1: New Mill Emission Units

Emission	Emission	Emission Unit	Raw Material	Rated Capacity
Point	Unit	Description		
	CC-2b	New Mill Hammermill 1		50 tons/hr
	CC-2c	New Mill Hammermill 2		50 tons/hr
	CC-2d	New Mill Separator 18'	Limestone	100 tons/hr
	CC-2e	New Mill Screen		25 tons/hr
CC-2	CC-2f	New Mill Screen		25 tons/hr
CC-2	CC-2g	New Mill Screen		25 tons/hr
	CC-2h	New Mill Screen		25 tons/hr
	CC-2i	New Mill Raymond Mill		35 tons/hr
	CC-2k	New Mill		
		Conveyors/Screws/		100 tons/hr
		Elevators		

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): See Note (1)

Authority for Requirement: 567 IAC 23.3(2)"c"

(1) IAC reference to NSPS Subpart OOO (*Standards of Performance for Nonmetallic Mineral Processing Plants*; 40 CFR §60.670 – 40 CFR §60.676).

Pollutant: PM-10

Emission Limit(s): 1.61 lb/hr

Authority for Requirement: DNR Construction Permit 86-A-049-S9

Pollutant: Particulate Matter - Federal Emission Limit(s): 0.032 g/dscm (2)

(2) 0.032 grams per dry standard cubic meter (g/dscm) = 0.014 grains per dry standard cubic foot (gr/dscf). Limit established per 40 CFR §60.672(a).

Authority for Requirement: DNR Construction Permit 86-A-049-S9

567 IAC 23.1(2)"bbb" ⁽³⁾

⁽³⁾ IAC reference to NSPS Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants; 40 CFR.

Pollutant: Particulate Matter - State

Emission Limit(s): 1.61 lb/hr, 0.01 gr/dscf (4)

Authority for Requirement: 567 IAC 31.20(1)"d", LAER

DNR Construction Permit 86-A-049-S9

(4) Limit established when the Buffalo, IA area was designated nonattainment for Total Suspended Particulates (TSP). Any relaxation of the Lowest Achievable Emission Rate (LAER) after the Buffalo area is redesignated attainment for TSP is subject to review under the Prevention of Significant Deterioration (PSD) regulations in effect at the time the relaxation occurs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS

These emission units are subject to NSPS Subparts A (*General Provisions*; 40 CFR §60.1 – 40 CFR §60.19) and OOO (*Standards of Performance for Nonmetallic Mineral Processing Plants*; 40 CFR §60.670 – 40 CFR §60.676).

Authority for Requirement: DNR Construction Permit 86-A-049-S9

40 CFR 60 Subpart A – 567 IAC 23.1(2)

40 CFR 60 Subpart OOO – 567 IAC 23.1(2)"bbb"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall maintain record per 40 CFR §60.676(b), the results of each Method 22 test, including the date and any corrective actions taken.
- B. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition C (shown below) by June 30, 2019.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- C. The differential pressure drop across Baghouse (CE CC-2) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE CC-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE CC-2), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE CC-2) falls outside the range

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specified in condition C (shown above), the owner or operator shall investigate Baghouse (CE CC-2) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE CC-2) are not in operation.

- D. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE CC-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE CC-2).

Authority for Requirement: DNR Construction Permit 86-A-049-S9

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 60

Stack Opening (inches, dia): 42 Exhaust Flow Rate (scfm): 30,600 Exhaust Temperature (°F): 150

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 86-A-049-S9

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
(See Operational Limits & Requirements for equivalent CAM language)	
Authority for Requirement: 567 IAC 22.108(3)	

Emission Point ID Number: CC-3

Associated Equipment

Associated Emission Unit ID Numbers: CC-3

Emissions Control Equipment ID Number: CE CC-3 Emissions Control Equipment Description: Baghouse

Table 1: **Calcium Loadout Units**

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity*
CC-3	CC-3	Calcium Railcar Loadout	Limestone	160 tons/hr
	CC-3A	North/South Belt		160 tons/hr
CC-3	CC-3B	East/West Belt		160 tons/hr
	CC-3C	Calcium Truck Loadout		85 tons/hr

^{*}Maximum Rated Capacity: 160 Tons of Limestone Products

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 7% (1)

(1) Limit established per Table 3 of Subpart OOO Part 60.

Authority for Requirement: DNR Construction Permit 88-A-218-S6

40 CFR 60 Subpart OOO 567 IAC 23.1(2)"bbb"

Pollutant: PM-10

Emission Limit(s): 0.36 lb/hr

Authority for Requirement: DNR Construction Permit 88-A-218-S6

Pollutant: Particulate Matter Emission Limit(s): 0.02 gr/dscf

Authority for Requirement: DNR Construction Permit 88-A-218-S6

40 CFR 60 Subpart OOO 567 IAC 23.1(2)"bbb"

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Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS

These emission units are subject to NSPS Subparts A (General Provisions; 40 CFR §60.1 – 40 CFR §60.19) and OOO (Standards of Performance for Nonmetallic Mineral Processing Plants; 40 CFR §60.670 – 40 CFR §60.676).

Authority for Requirement: DNR Construction Permit 88-A-218-S6

40 CFR 60 Subpart A – 567 IAC 23.1(2)

40 CFR 60 Subpart OOO – 567 IAC 23.1(2)"bbb"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum amount of product loaded out using the Calcium Railcar loadout shall not exceed 160 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product loaded out in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average the amount of product loaded out in tons.
- B. The maximum amount of product loaded out using the Calcium Truck loadout shall not exceed 85 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product loaded out in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average the amount of product loaded out in tons.
- C. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition D (shown below) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- D. The differential pressure drop across Baghouse (CE CC-3) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE CC-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE CC-3), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the

average hourly pressure drop across Baghouse (CE CC-3) falls outside the range specified in condition D (shown above), the owner or operator shall investigate Baghouse (CE CC-3) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE CC-3) are not in operation.

- E. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE CC-3), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE CC-3).

Authority for Requirement: DNR Construction Permit 88-A-218-S6

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 37

Stack Opening (inches): 17

Exhaust Flow Rate (scfm): 1,500 Exhaust Temperature (°F): Ambient Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 88-A-218-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
(See Operational Limits & Requirements for equivalent CAM language)	
Authority for Requirement: 567 IAC 22.108(3)	

Emission Point ID Number: CC-5

Associated Equipment

Associated Emission Unit ID Numbers: CC-2a and CC-2k

Emissions Control Equipment ID Number: CC-5 Emissions Control Equipment Description: Baghouse

Table 1: New Mill Emission Units

Emission	Emission	Emission Unit Description	Raw Material	Rated Capacity
Point	Unit			
CC-5	CC-2a		Limestone	70 tons/hr
		Dryer	Natural Gas or	0.0287 MMcf/hr
CC-3			Landfill Gas	(28.7 MMBtu/hr)
	CC-2k	Conveyors/Screws/Elevators	Limestone	100 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit(s): 7%

Authority for Requirement: DNR Construction Permit 98-A-846-S2

40 CFR 60 Subpart OOO 567 IAC 23.1(2)"bbb"

Pollutant: PM-10

Emission Limit(s): 0.93 lb/hr

Authority for Requirement: DNR Construction Permit 98-A-846-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf, 0.05 grams/dscm (1)

 $^{(1)}$ 0.05 grams/dscm = 0.022 gr./dscf

Authority for Requirement: DNR Construction Permit 98-A-846-S2

40 CFR 60 Subpart OOO 567 IAC 23.1(2)"bbb"

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Pollutant: Particulate Matter

LAER Emission Limit(s): 0.01 gr/dscf (2)

Authority for Requirement: DNR Construction Permit 98-A-846-S2

(2) Limit established when the Buffalo area was designated non-attainment for TSP (PM). Any relaxation in the Lowest Achievable Emission Rate (LAER) after the Buffalo Area is re-designated attainment for TSP (PM) is subject to review under the PSD regulations in effect at the time the relaxation occurs.

Pollutant: Sulfur Dioxide (SO₂) Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 98-A-846-S2

567 IAC 23.3(3)"e"

NSPS

A. These units are subject to New Source Performance Standards (NSPS) Subpart A (General Provisions) and Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants).

Authority for Requirement: DNR Construction Permit 98-A-846-S2

40 CFR 60 Subpart A – 567 IAC 23.1(2)

40 CFR 60 Subpart OOO - 567 IAC 23.1(2)"bbb"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

• The fuel for the New Mill Dryer (CC-2a) is limited to either natural gas or landfill gas.

Control equipment parameters

• The owner or operator shall maintain the control equipment according to manufacturer's specifications and maintenance schedule.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

• The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control equipment

Authority for Requirement: DNR Construction Permit 98-A-846-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 97

Stack Opening (inches, dia.): 30 Exhaust Flow Rate (scfm): 20,600 Exhaust Temperature (°F): 100

Discharge Style: Vertical unobstructed

Authority for Requirement: DNR Construction Permit 98-A-846-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: CC-16

Associated Equipment

Associated Emission Unit ID Numbers: CC-16 Emissions Control Equipment ID Number: NA Emissions Control Equipment Description: None

Table 1: Loadout #6 Bins

Emission	Emission	Emission Unit Description	Raw Material	Rated Capacity
Point	Unit			
	CC-16	Long Conveyor		70 tons/hr
CC-16	CC-17	Granular Bin #1	Limestone	70 tons/hr
	CC-18	Granular Bin #2		70 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% (1)

(1) An exceedance of the indicator opacity of No Visible Emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permit 17-A-488

567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 0.08 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-488

Pollutant: Particulate Matter

Emission Limit(s): 0.21 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-488

567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum amount of product transferred using loadout #6 bins shall not exceed 70 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product transferred in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average the amount of product transferred in tons.
- B. The owner or operator shall check for visible emissions from Loadout #6 bins (EP CC-16) once per week at a time while Loadout #6 bins (EP CC-16) is in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from Loadout #6 bins (EP CC-16), the owner or operator shall investigate the emission unit or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Loadout #6 bins (EP CC-16) is not in operation.

Authority for Requirement: DNR Construction Permit 17-A-488

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 62 Stack Opening (inches, dia.): 32 x 32 Exhaust Flow Rate (scfm): 2,178 Exhaust Temperature (°F): Ambient Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-488

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements	
The owner/operator of this equipment shall comply with the monitoring	requirements listed
below.	
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes No No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: HR-U

Associated Equipment

Associated Emission Unit ID Numbers: HR-U

Emissions Control Equipment ID Number: CE Unpaved Haul Roads

Emissions Control Equipment Description: Dust Suppressant

Applicable Requirements

Emission Unit vented through this Emission Point: HR-U

Emission Unit Description: Unpaved Haul Roads

Raw Material/Fuel: Limestone

Rated Capacity: NA

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: Fugitive Dust (1)

The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 18-A-108-S1

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s): 409 lbs/day (2)

Emission limit for PM₁₀ established at 409 pounds of PM₁₀ per day, which correlates to surface silt loading as specified in Condition A and B of Operational Limits & Requirements (below) and maximum worst case truck traffic (material/product is shipped or received by truck). The parameters used in calculation are specified in Condition A and B (below). The emission rate also includes emissions of haul roads located within the storage Piles A, Pile 4, and Pile 8.

Authority for Requirement: DNR Construction Permit 18-A-108-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The total surface material silt content shall not exceed 2.1 percent on unpaved road segments 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 24.
 - i. Beginning October 1, 2018, performance testing on the unpaved haul road surface silt content shall be determined once every other calendar month. Performance testing shall be completed prior to any suppressant application. The silt content sampling shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading and Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples. If suppressant application cannot be accomplished for the entire month due to ambient temperatures or hazardous weather, silt content sampling is not required for that month.
 - ii. Silt content sampling shall be conducted on unpaved road segments 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 24. The owner or operator shall sample a minimum of three unpaved road segments and rotate the segments sampled each time. The owner or operator shall determine the average of all samples taken each time, expressed as silt content for the unpaved roads.
 - iii. The owner or operator shall maintain a log of each silt content sampling event that contains the following:
 - i. Records of the road segments sampled every other calendar month.
 - ii. The measured silt content as percent.
 - iii. The date of silt sampling event.
 - iv. The location of the sample taken.
 - v. Sample area used for silt sampling in feet.
 - vi. The operator's initials.
 - iv. The owner or operator shall maintain record of the average silt content results expressed as percent every other calendar month.
- B. The total surface material silt content shall not exceed 6.2 percent on unpaved road segments 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 82, 83, and 84.
 - i. Beginning October 1, 2018, performance testing on the unpaved haul road surface silt content shall be determined on a quarterly basis. Performance testing shall be completed prior to any suppressant application. The silt content sampling shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading and Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples.
 - ii. Silt content sampling shall be conducted on unpaved road segments 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 82, 83, and 84. The owner or operator shall sample a minimum of three unpaved road segments and rotate the segments sampled for each calendar quarter. The owner or operator shall determine the average of all samples taken for each calendar quarter, expressed as silt content for the unpaved roads.

- iii. The owner or operator shall maintain a log of each silt content sampling event that contains the following:
 - i. Records of the road segments sampled each quarter.
 - ii. The measured silt content as percent.
 - iii. The date of silt sampling event.
 - iv. The location of the sample taken.
 - v. Sample area used for silt sampling in feet.
 - vi. The operator's initials.
- iv. The owner or operator shall maintain record of the average silt content results expressed as percent for each quarter.
- C. The owner or operator shall utilize control measures to reduce particulate emissions generated on unpaved road segments, while in use except as noted in conditions C.ii and C.iii (shown below). These measures include any of the following:
 - i. Chemical dust suppressant application. The owner or operator shall apply chemical dust suppressant to the road surface at minimum frequency of twice per month.
 - ii. If the suppressant cannot be applied because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35° F (1.7° C) or conditions due to weather could create hazardous driving conditions, then the suppressant application shall be postponed and applied immediately after the scheduled date as the conditions preventing the application have abated.
 - iii. Suppressant application need not occur when a rain gauge located at the site indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hour time period. However, suppressant application shall resume within 24-hours after the precipitation event has ended
- D. If visible emissions are observed from the Unpaved Road Segments, during use, the owner or operator shall immediately apply water or chemical dust suppressant to haul road segment.
- E. The owner or operator shall maintain as record of the suppressant application on unpaved road segments. The record shall include suppressant application frequency, quantity applied and suppressant utilized. If suppressant is not applied due to weather as specified in conditions C.ii and C.iii (shown above), a written record must be kept on site outlining the conditions and when suppressant application resumed.
- F. Best Management Practices (BMP) The owner or operator shall implement "good housekeeping" or best management practices to minimize fugitive emissions from unpaved road segments. Such practices may include but are not limited to:
 - i. Clean up spills of materials on the road surface as expeditiously as possible and in a manner consistent with good practice for minimizing dust emissions,
 - ii. Post and maintain speed limit (10 mph) signs,
 - iii. Apply additional suppressant to material unloading/loading areas as necessary to prevent track out of material on the traveled road surface.

- G. The owner or operator shall develop a written plan to implement, at a minimum, the Best Management Practices as specified in condition F (shown above). The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.
- H. Maximum number of trucks shall not exceed:
 - i. 2,208 trucks per calendar month on segment 13.
 - ii. 4772 trucks per calendar month on segment 85.
 - iii. The owner or operator shall record the total number of trucks on segment 13 for each calendar month.
 - iv. The owner or operator shall record the total number of trucks on segment 85 for each calendar month.
 - v. Based on throughput and storage capacity limitations, the plant truck traffic on paved and unpaved surfaces is directly proportional to the quantity of trucks measured on segments 13 and 85 (customer output). If plant operations change, the owner or operator shall request amendment of the paved or unpaved haul roads permit requirements.

Authority for Requirement: DNR Construction Permit 18-A-108-S1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM10	Silt Sampling	Quarterly	NA	
PM10	Silt Sampling	Once every other calendar month (segments 2,3,4,5,6,7,8,9, 10,11,1, 2 and 24)*	NA	AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading, Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples

^{*}The facility could request the department to lower silt sampling frequency after successfully collecting at least 4 data points.

Stack Test to be completed:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

Authority for Requirement: DNR Construction Permit 18-A-108-S1	
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
Authority for Requirement: 567 IAC 22.108(3)	

Emission Point ID Number: HR-P

Associated Equipment

Associated Emission Unit ID Numbers: HR-P

Emissions Control Equipment ID Number: CE Paved Haul Roads

Emissions Control Equipment Description: Sweeping and Water Flushing

Emission Unit vented through this Emission Point: HR-P

Emission Unit Description: Paved Haul Roads

Raw Material/Fuel: Limestone

Rated Capacity: NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: Fugitive Dust (1)

(1) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 18-A-109-S1

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s): 58.32 lbs/day (2)

Emission limit for PM₁₀ established at 58.32 pounds of PM₁₀ per day, which correlates to surface silt loading as specified in Condition A of Operational Limits & Requirements (below) and maximum worst case truck traffic (material/product is shipped or received by truck). The parameters used in calculation are specified in Condition A of Operational Limits & Requirements (below).

Authority for Requirement: DNR Construction Permit 18-A-109-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The total surface material silt loading shall not exceed 8.2 g/m² on paved road segments 1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 85 and 86.

- i. Beginning October 1, 2018, performance testing on the haul road surface silt loading shall be determined on a quarterly basis. Performance testing shall be completed prior to any sweeping or water flushing. The silt loading sampling shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading and Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples.
- ii. Surface silt loading sampling shall be conducted on paved road segments, as listed in 1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 85 and 86. The owner or operator shall sample a minimum of three paved road segments and rotate the segments sampled each calendar quarter. The owner or operator shall determine the average of all samples taken for each calendar quarter, expressed as silt loading for the paved roads.
- iii. The owner or operator shall maintain a log of each silt load sampling event that contains the following:
 - a. Records of the road segments sampled each quarter.
 - b. The measured silt loading as grams.
 - c. The date of silt sampling event.
 - d. The location of the sample taken.
 - e. Sample area used for silt sampling in feet.
 - f. The operator's initials.
- iv. The owner or operator shall maintain record of the average silt loading results in g/m² for each quarter.
- B. Truck traffic emissions on the paved road shall be controlled by weekly sweeping, at a minimum, except as specified in conditions B. i, ii, and iii (shown below). At a minimum, the sweeper shall be an enclosed vacuum sweeper or functional equivalent as approved by the department.
 - i. If sweeping cannot be accomplished because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35° F (1.7° C) or conditions due to weather could create hazardous driving conditions, then the sweeping shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the sweeping have abated.
 - ii. Paved road sweeping need not occur when a rain gauge located at the site indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hour time period. However, paved road sweeping shall resume within 24-hours after the precipitation event has ended.
 - iii. Paved road sweeping need not occur when the facility experiences no haul road traffic on that calendar day.
 - iv. The facility shall record the frequency of cleaning/sweeping performed on the haul roads. If the roads are not cleaned due to weather, a written record must be kept on site outlining the conditions.

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- C. Truck traffic emissions on the paved road shall be controlled by water flushing at a rate of 0.12 gallons per square feet, three times a day at a minimum, except as specified in B. i, ii and iii (shown above).
 - i. If water flushing cannot be accomplished because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35° F (1.7° C) or conditions due to weather could create hazardous driving conditions, then the water flushing shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the water flushing have abated.
 - ii. Paved road water flushing need not occur when a rain gauge located at the site indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hour time period. However, paved road water flushing shall resume within 24-hours after the precipitation event has ended.
 - iii. Paved road water flushing need not occur when the facility experiences no haul road traffic on that calendar day.
 - iv. The facility shall record the frequency of water flushing performed on the haul roads. If the roads are not water flushed due to weather, a written record must be kept on site outlining the conditions.
- D. Maximum number of trucks shall not exceed:
 - i. 2,208 trucks per calendar month on segment 13.
 - ii. 4,772 trucks per calendar month on segment 85.
 - iii. The owner or operator shall record the total number of trucks on segment 13 for each calendar month.
 - iv. The owner or operator shall record the total number of trucks on segment 85 for each calendar month.
 - v. Based on throughput and storage capacity limitations, the plant truck traffic on paved and unpaved surfaces is directly proportional to the quantity of trucks measured on segments 13 and 85 (customer output). If plant operations change, the owner or operator shall request amendment of the paved or unpaved haul roads permit requirements.
- E. Best Management Practices (BMP) The owner or operator shall implement "good housekeeping" or best management practices to minimize fugitive emissions from plant haul roads. Such practices include but are not limited to:
 - Clean up spills of raw materials and product on the haul road surface as expeditiously as possible and in a manner consistent with good practice for minimizing dust emissions.
 - ii. Clean around truck scale areas and process buildings in a manner consistent with good practice for minimizing fugitive emissions.
 - iii. Clean up spills of raw materials and product on Iowa Highway 22 as expeditiously as possible and in a manner consistent with good practice for minimizing dust emissions.
 - iv. Post and maintain speed limit (10 mph) signs.
- F. The owner or operator shall develop a written plan to implement, at a minimum, the Best Management Practices as specified in condition E (shown above). The written plan and any

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documentation as required by the plan shall be maintained onsite and available for inspection.

Authority for Requirement: DNR Construction Permit 18-A-109-S1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM10	Silt Sampling	Quarterly (segments 1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 85 and 86)	NA	AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading, Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples

Stack Test to be completed:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

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Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: Storage Piles (Pile 2, Pile 3, Pile 5, Pile 10, Pile 12, Pile 13, Pile 15, Pile 16, Pile 17, Pile 18)

Associated Equipment

Associated Emission Unit ID Numbers: EU-Pile 2, EU-Pile 3, EU-Pile 5, EU-Pile 10, EU-Pile 12, EU-Pile 13, EU-Pile 15, EU-Pile 16, EU-Pile 17,

EU-Pile 18

Emission Unit vented through this Emission Point: EU-Pile 2, EU-Pile 3, EU-Pile 5, EU-Pile 10,

EU-Pile 12, EU-Pile 13, EU-Pile 15, EU-Pile 16, EU-Pile 17, and EU-Pile 18

Emission Unit Description: Material Storage Piles

Raw Material/Fuel: Limestone

Rated Capacity: NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity (All Material Storage Piles)

Emission Limit: Fugitive Dust (1)

(1) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 18-A-110

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s) Pile 2 (Undisturbed): 0.18 lbs/day

Emission Limit(s) Pile 3: 1.16 lbs/day Emission Limit(s) Pile 5: 2.7 lbs/day

Emission Limit(s) Pile 10 (Undisturbed): 0.08 lbs/day Emission Limit(s) Pile 12 (Undisturbed): 0.06 lbs/day Emission Limit(s) Pile 13 (Undisturbed): 0.20 lbs/day

Emission Limit(s) Pile 15 (Undisturbed): 0.16 lbs/day

Emission Limit(s) Pile 16: 4.09 lbs/day Emission Limit(s) Pile 17: 0.86 lbs/day

Emission Limit(s) Pile 18 (Undisturbed): 0.71 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-110

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall maintain the area of Piles, in square feet, less than or equal to the area listed in the table below.
 - i. Maintain records of area of each pile as listed in table below in square feet, on an annual basis.

EP ID	Maximum Area (square feet)	
Pile 2	12,628	
Pile 3	28,825	
Pile 5	40,166	
Pile 10	19,814	
Pile 12	55,683	
Pile 13	442,704	
Pile 15	535,773	
Pile 16	87,425	
Pile 17	203,244	
Pile 18	1,170,056	

- B. The owner or operator shall notify the department within 30-days if the following storage piles are disturbed more frequently than once per calendar month.
 - i. Pile 2, Pile 10, Pile 12, Pile 13, and Pile 15.
 - ii. The owner or operator shall maintain records of the Pile 2, Pile 10, Pile 12, Pile 13, and Pile 15 disturbance frequency.
- C. During high wind episodes (greater than 12 miles per hour), if visible emissions are observed from the working face of active Piles listed in the table above, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement at a minimum measures to minimize emissions during high wind episodes as specified in condition C (shown above). The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection

Authority for Requirement: DNR Construction Permit 18-A-110

Monitoring Requirements	
The owner/operator of this equipment shall comply with the monitoring	requirements listed
below.	
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: Q11C

Associated Equipment

Associated Emission Unit ID Numbers: Q11C-1, Q11C-1, Q11C-3, Q11C-4, Q11C-5, Q11C-6 &

Pile I

Emissions Control Equipment ID Number: NA

Emissions Control Equipment Description: Building Enclosure and Windscreen

Applicable Requirements

Table 1: Screening Plant and Conveyors

Emission	Emission	Emission Unit	Raw	Rated Capacity
Point	Unit	Description	Material	
	Q11C-1	Feed Conveyor (1)		105 tons per hour
	Q11C-2	Screener (1)		105 tons per hour
	Q11C-3	11C-3 Overs Conveyor (1)		10 tons per hour
	Q11C-5 Weig	Unders Conveyor (1)	Limestone	10 tons per hour
		Weigh Conveyor (1)		85 tons per hour
Q11C	Q11C-6	Stacker (2)		85 tons per hour
				Load In: 2.1% moisture
				Load Out: windscreen (50% control
	Pile I	Pile I (3)		efficiency), 2.1% moisture
				Wind erosion: 3.9% Silt Loading
				Area: 28,179 ft ²

¹⁾ Building enclosure as control, (2) No control, (3) Windscreen as control

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Emission Limits Q11C Sugarbeet Plant and Screener

Pollutant: Opacity

Emission Limit: Fugitive Dust (1)

(1) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 18-A-111-S1

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s): 1.14 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-111-S1

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Emission Limits Pile I

Pollutant: Opacity

Emission Limit: Fugitive Dust (1)

(1) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive

dusts beyond lot line of the property (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 18-A-111-S1

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s): 3.54 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-111-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall maintain the building as an enclosed structure to utilize 95 percent reduction of particulate emissions generated at:
 - i. Q-11C-1 Feed Conveyor
 - ii. Q-11C-2 Screener
 - iii. Q-11C-3 Overs Conveyor
 - iv. Q-11C-4 Unders Conveyor
 - v. Q-11C-5 Weight Conveyor
- B. The owner or operator shall develop an operating and maintenance plan for the building structure, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the building structure.
- C. The owner or operator shall install a windscreen on Pile I hopper by October 1, 2018.
 - i. The owner or operator shall maintain a record of the date when installation of windscreen is completed.
- D. The owner or operator shall maintain the windscreen in a manner to minimize emissions and achieve 50 percent reduction in emissions due to loadout of material from pile I hopper. The windscreen shall be at minimum enclosed on three sides, at a height of 5 feet above the hopper and maintained in good working order.
 - i. The owner or operator shall develop an operating and maintenance plan for the

- pile I hopper windscreen, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the pile I hopper windscreen.
- E. The owner or operator shall check for visible emissions from building enclosing all units associated with EP Q-11C once per calendar day at a time while units associated with EP Q-11C is in operation.
 - i. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from building enclosing units associated with EP Q-11C, the owner or operator shall investigate the emission unit or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that units associated with EP Q-11C are not in operation.
- F. The owner or operator shall maintain the total area of Pile I to less than or equal to 28,179 square feet.
 - i. The owner or operator shall maintain annual records of Pile I area in square feet.
- G. During high wind episodes (greater than 12 miles per hour) if visible emissions are observed from the working face of Pile I, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement at a minimum measures to minimize emissions during high wind episodes as specified in condition G (shown above). The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.
- H. Beginning June 30, 2019, the owner or operator shall maintain Pile I a minimum distance of 85 feet from the fence line along highway 22.
 - i. The owner or operator shall maintain records of the date when Pile I was moved 85 feet from the fence line along highway 22.
 - ii. The owner or operator shall maintain annual records of the distance from the fence line along highway 22 for Pile I.

Authority for Requirement: DNR Construction Permit 18-A-111-S1

Monitoring Requirements	
The owner/operator of this equipment shall comply with the monitoring	g requirements listed
below.	
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: LP-4

Associated Equipment

Associated Emission Unit ID Numbers: See Table 1, below Emissions Control Equipment ID Numbers: See Table 2, below

Emissions Control Equipment Description: Multiple Cyclone (for each kiln) & Limestone

Mining Tunnel

Continuous Emissions Monitors ID Numbers: COM1*

* EPA-approved Alternative Opacity Monitoring is being used to demonstrate compliance instead of COM1.

Table 1: Rotary Lime Kiln System

Emission Point	Emission Unit	Emission Unit Description (Calcining and Rotary Kilns)	Raw Material	Rated Capacity
	LP- Kiln#1	Dry Rotating Lime Kiln		5 tons/hr
	LP- Kiln#2	Dry Rotating Lime Kiln	Limestone, Coal, Petroleum Coke, Natural Gas, and Landfill Gas	5 tons/hr
15.4	LP- Kiln#3	Preheater Lime Kiln		8.75 tons/hr
LP-4	LP- Kiln#4	Preheater Lime Kiln		21.875 tons/hr
	LP-41	Elevator 431		50 tons/hr
	LP-42	Conveyor 446		50 tons/hr
	LP-50	West Kiln Run Tank 442		900 Tons
	LP-51	East Kiln Run Tank 443		900 Tons

Table 2: Control Equipment for Rotary Lime Kiln System

Emission Unit	1 st set of Control Equipment	2 nd Set of Control Equipment
Dry Rotating Kiln (Kiln #1)	Production cyclones C1, C2, C3, C4	
Dry Rotating Kiln (Kiln #2)	Production cyclones C1, C2, C3, C4	
Preheater Lime Kiln (Kiln #3)	Production cyclones C1, C2, C3, C4	Limestone Mining
Preheater Lime Kiln (Kiln #4)	C4-East, C4-West	Tunnel (CE TL1)
Elevator 431 (LP-41)	C3, C4	
Conveyor 446 (LP-42)	C3, C4	
West Kiln Run Tank 442 (LP-50)	C3, C4	
East Kiln Run Tank 443 (LP-51)	C3, C4	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

A. Emission Limits with Kiln 4 Operating:

Pollutant: Opacity

Emission Limit(s): 15%

Authority for Requirement: DNR Construction Permit 73-A-219-S7

40 CFR 60 Subpart HH 567 IAC 23.1(2)"y"

Pollutant: PM-10

Emission Limit(s): 45.59 lb/hr

Authority for Requirement: DNR Construction Permit 73-A-219-S7

Pollutant: PM-10

Emission Limit(s): 0.51 lb/ton lime (2)

(2) This emission limit is for Kiln 4

Authority for Requirement: DNR Construction Permit 73-A-219-S7

Pollutant: Particulate Matter (Federal)

Emission Limit(s): 0.30 kg/megagram (0.6 lb/ton) of stone feed

Authority for Requirement: DNR Construction Permit 73-A-219-S7

40 CFR 60 Subpart HH 567 IAC 23.1(2)"y"

Pollutant: Particulate Matter (State) Emission Limit(s): 0.51 lb./ton lime (2)

(2) This emission limit is for Kiln 4.

Authority for Requirement: DNR Construction Permit 73-A-219-S7

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 9.45 lb/hr, 41.4 tons/year

Authority for Requirement: DNR Construction Permit 73-A-219-S7

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv – when combusting only gaseous fuels (i.e. natural gas and

landfill gas) (1)

(1) The sulfur dioxide limit is the stricter of 6 lb./MMBtu and 500 ppmv when using a combination of fuels.

Authority for Requirement: DNR Construction Permit 73-A-219-S7

567 IAC 23.3(3)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 6 lb/MMBtu – when combusting only solid fuels (i.e. coal and pet coke) (1)

(1) The sulfur dioxide limit is the stricter of 6 lb/MMBtu and 500 ppmv when using a combination of fuels.

Authority for Requirement: DNR Construction Permit 73-A-219-S7

567 IAC 23.3(3)"a"(1)

Pollutant: Nitrogen Oxides (NOx)

Emission Limit(s): 58.9 lb/hr, 272.2 tons/year

Authority for Requirement: DNR Construction Permit 73-A-219-S7

Pollutant: Carbon Monoxide

Emission Limit(s): 46.8 lb/hr, 205.2 tons/year

Authority for Requirement: DNR Construction Permit 73-A-219-S7

Pollutant: Hydrochloric Acid (HCl) Emission Limit(s): 0.35 lb/hr

Authority for Requirement: DNR Construction Permit 73-A-219-S7

B. Emission Limits When Kiln 4 Is Not Operating:

Pollutant: Opacity

Emission Limit(s): 40% (1)

(1) An exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permit 73-A-219-S7

Pollutant: PM-10

Emission Limit(s): 45.59 lb/hr

Authority for Requirement: DNR Construction Permit 73-A-219-S7

Pollutant: PM-10

Emission Limit(s): 1.58 lb/ton lime

Authority for Requirement: DNR Construction Permit 73-A-219-S7

Pollutant: Particulate Matter

Emission Limit(s): 1.58 lb/ton lime (2)

(2) The stack is also subject to a standard of 0.1 gr/scf

Authority for Requirement: DNR Construction Permit 73-A-219-S7

567 IAC 23.4(8)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv - when combusting only gaseous fuels (i.e. natural gas and

landfill gas) (3)

(3) The sulfur dioxide limit is the stricter of 6 lb./MMBtu and 500 ppmv when using a combination of fuels.

Authority for Requirement: DNR Construction Permit 73-A-219-S7

567 IAC 23.3(3)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 6 lb/MMBtu – when combusting only solid fuels (i.e. coal and pet coke). (4)

(4) The sulfur dioxide limit is the stricter of 6 lb./MMBtu and 500 ppmv when using a combination of fuels.

Authority for Requirement: DNR Construction Permit 73-A-219-S7

567 IAC 23.3(3)"a"(1)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS & NESHAP

A. Kiln #4 is subject to Subpart A (General Provisions, 40 CFR §60.1 – 40 CFR §60.19) and Subpart HH (Standards of Performance for Lime Manufacturing Plants, 40 CFR §60.340 – 40 CFR §60.344) of the New Source Performance Standards (NSPS).

Authority for Requirement: DNR Construction Permit 73-A-219-S7

40 CFR 60 Subpart A – 567 IAC 23.1(2)

40 CFR 60 Subpart HH 567 IAC 23.1(2)"y"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. Total lime production for the plant shall be limited according to the plant annual total NO_x emission limitation set forth in Condition 1.a. and as listed in the equation in condition A. i (shown below):
 - i. Compliance with the annual NO_x limit shall be demonstrated as follows:
 Calculate the monthly NO_x emissions from Kilns #1 #4:
 Tons of NO_x emissions/month = [(tons of lime production from Kilns #1 & #2) x (EF₁) + (tons of lime production from Kilns #3 & #4) x (EF₂)] ÷ 2000 lb/ton

Where:

 $\mathrm{EF_1} = \mathrm{lb} \ \mathrm{NO_x/ton}$ of lime produced for the combined exhaust from kilns #1 and #2. The combined exhaust shall be used to purge the tunnel at least 12 hours before conducting the stack test, and the lime produced during the test period shall be recorded.

 $\mathrm{EF_2} = \mathrm{lb}\ \mathrm{NO_x/ton}$ of lime produced for the combined exhaust from kilns #3 and #4. The combined exhaust shall be used to purge the tunnel at least 12 hours before conducting the stack test, and the lime produced during the test period shall be recorded.

- ii. Calculate the twelve (12) month rolling total NO_x emissions for each month of operation.
- B. The owner or operator of Kiln #4 shall install, calibrate, maintain, and operate a device for measuring the mass rate of stone feed to Kiln #4. The measuring device used must be accurate to within ± 5% of the mass rate over its operating range pursuant to NSPS Subpart HH [40 CFR §60.343(d)].
- C. The owner or operator of the facility (plant number 82-01-015) shall either
 - 1. Install, calibrate, maintain, and operate a device for measuring the mass rate of lime products from Kilns #1, #2, #3, and #4. The measuring device used must be accurate to within \pm 5% of the mass rate over its operating range or
 - 2. In lieu of installing a belt scale on all four (4) kilns, record the total production for Kilns 1 3 and the total production for Kiln 4 and use the following formula to demonstrate compliance with the NO_x limit:

Tons of NO_x emissions/month = [(tons of lime production from Kilns #1, #2, & #3) x (EF_3) + (tons of lime production from Kiln #4) x (EF_2)] ÷ 2000 lb/ton

Where:

 $EF_3 = lb NO_x/ton of lime produced for the combined exhaust from kilns #1, #2, and #3. The combined exhaust shall be used to purge the tunnel at least 12 hours before conducting the stack test, and the lime produced during the test period shall be recorded.$

- D. If the facility (plant number 82-01-015) intends on changing the method of demonstrating compliance with either the NO_x emission limit or the opacity monitoring requirements of Condition 6, the facility shall inform (in writing) the Compliance Supervisor of the Air Quality Bureau and the Field Office of its intentions thirty (30) days prior to making the change.
- E. The emission units listed in this permit are limited to coal, petroleum coke, natural gas, and landfill gas as fuels.

Continuous Emission Monitoring Systems (CEMS)

The facility (plant number 82-01-015) shall either:

- Install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system for all periods when Kiln #4 is in operation in accordance with the New Source Performance Standards (NSPS) Subpart HH (Standards of Performance for Lime Manufacturing Plants). The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 1 (PS1) or
- Conduct opacity monitoring for those periods when Kiln #4 is in operation per an EPA approved alternative opacity monitoring program.

Authority for Requirement: DNR Construction Permit 73-A-219-S7

40 CFR 60 Subpart HH 567 IAC 23.1(2)"y"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 79 Stack Opening (inches, dia): 78 Exhaust Flow Rate (scfm): 125,000 Exhaust Temperature (°F): 108

Discharge Style: Vertical Unobstructed Authority for Requirement: DNR Construction Permit 73-A-219-S7

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required? (CAM is required only when Kiln 4 is operating)	Yes 🖂 No 🗌

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: LP-7

Associated Equipment

Associated Emission Unit ID Numbers: LP-7 Emissions Control Equipment ID Number: LP-7 Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: LP-7 Emission Unit Description: Kiln Dust Tank and Loadout

Raw Material/Fuel: Lime Fines

Rated Capacity: Loadout: 80 tons/hour, 1050 tons of lime, limestone and flyash

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % (1)

(1) An exceedance of the indicator opacity of No Visible Emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permit 88-A-220-S5

567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 0.15 lb/hr

Authority for Requirement: DNR Construction Permit 88-A-220-S5

Pollutant: Particulate Matter

Emission Limit(s): 0.63 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 88-A-220-S5

567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum amount of product loaded out using lime kiln dust loadout shall not exceed 240 tons per 3-hr period.
 - i. The owner or operator shall maintain records of the amount of product loaded out every 3-hours, in tons.
- B. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition C. (shown below) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- C. The differential pressure drop across Baghouse (CE LP-7) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-7). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-7), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-7) falls outside the range specified in Condition C. (above), the owner or operator shall investigate Baghouse (CE LP-7) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-7) are not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-7), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE LP-7).

Authority for Requirement: DNR Construction Permit 88-A-220-S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 94

Stack Opening (inches): 12

Exhaust Flow Rate (scfm): 4,350 Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 88-A-220-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

the owner/operator of this equipment shall comply with the monitoring requirements listed below.
Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☐
Facility Maintained Operation & Maintenance Plan Required? Yes ⊠ No ☐ Relevant requirements of O & M plan for this equipment: PM₁₀ and Particulate Matter
Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.
Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.
Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.
Compliance Assurance Monitoring (CAM) Plan Required? Yes 🗌 No 🖂
Authority for Requirement: 567 IAC 22.108(3)

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Emission Point ID Number: LP-8

Associated Equipment

Associated Emission Unit ID Numbers: LP-8a, LP-8b, LP-8c, LP-8d, LP-8e, LP-8f, LP-8h,

LP-8i & LP-8j

Emissions Control Equipment ID Number: CE LP-8 Emissions Control Equipment Description: Baghouse

Table 1: **#4 Lime Truck Loadout System**

Emission	Emission	Emission Unit Description	Raw Material	Rated Capacity*
Point	Unit			
LP-8	LP-8a	Tank 445	Lime	500 tons
	LP-8b	Tank 446	Lime	500 tons
	LP-8c	Tank 447	Lime	500 tons
	LP-8d	Crusher	Lime	50 tons/hr
	LP-8e	Screen	Lime	50 tons/hr
	LP-8f	Briquetter	Lime	5 tons/hr
	LP-8g	Pneumatic Blower	Lime	25 tons/hr
	LP-8h	Tank 441	Lime	500 tons
	LP-8i	Scale #1 Loadout System	Lime	90 tons/hr
	LP-8j	Tank 446B	Lime	200 tons

^{*} Maximum rated capacity: 90 tons per hour.

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % (1)

(1) An exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permit 88-A-221-S9

567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 0.94 lb/hr

Authority for Requirement: DNR Construction Permit 88-A-221-S9

Pollutant: Particulate Matter

Emission Limit(s): 1.0 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 88-A-221-S9

567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum amount of lime loaded out using the truck loadout system shall not exceed 90 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product loaded out in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average of product loaded out in tons.
- B. The stack shall be raised to 105 feet from the ground within 90 days of permit issuance.
 - i. The owner or operator shall maintain a record of the completion date that stack EP LP-8 was increased to 50 feet from the ground.
- C. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition D (shown below) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- D. The differential pressure drop across Baghouse (CE LP-8) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-8). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-8), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-8) falls outside the range specified in condition D (shown above), the owner or operator shall investigate Baghouse (CE LP-8) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-8) are not in operation.

- E. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-8), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE LP-8).

Authority for Requirement: DNR Construction Permit 88-A-221-S9

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 105

Stack Opening (inches, dia): 22 Exhaust Flow Rate (scfm): 5,500 Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 88-A-221-S9

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required? Relevant requirements of O & M plan for this equipment:	
·	

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Compliance Assurance Monitoring (CAM) Plan Required?

Yes
No

Authority for Requirement: 567 IAC 22.108(3)

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Emission Point ID Number: LP-9

Associated Equipment

Associated Emission Unit ID Numbers: K-1 through K-4

Emissions Control Equipment ID Number: 1st Control Equipment (Multiple Cyclones): CE

MC1, CE MC2, CE MC3, CE MC4

2nd Control Equipment (Baghouse): CE LP-9

Emissions Control Equipment Description: Multiple Cyclone (for each kiln) & Baghouse

Table 1: Four (4) Rotary Lime Kilns

Emission	Emission	Emission Unit Description	Raw Materials	Rated Capacity*
Point	Unit			
LP-9	K-1	Dry Rotating Lime Kiln #1	Limestone, coal,	5 tons of lime/hr
	K-2	Dry Rotating Lime Kiln #2	petroleum coke,	5 tons of lime/hr
LF-9	K-3	Preheater Lime Kiln #3	natural gas and	8.75 tons of lime/hr
	K-4	Preheater Lime Kiln #4	landfill gas	21.875 tons of lime/hr

^{* 31.875-}tons of lime per hour

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

Pollutant: Opacity

Emission Limit(s): 15% (1)

(1) The 15% opacity standard shall apply to this emission point during all periods of Kiln 4 operation. A 0% opacity standard shall apply to this emission point when Kiln 4 is not in operation. The facility (plant number 82-01-015) may establish a source specific opacity standard other than the 0% during the initial compliance test.

Authority for Requirement: DNR Construction Permit 91-A-324-S6

40 CFR 60 Subpart HH 567 IAC 23.1(2)"y"

Pollutant: PM-10

Emission Limit(s): 29.9 lb/hr, 14.0 tons/yr

Authority for Requirement: DNR Construction Permit 91-A-324-S6

Pollutant: Particulate Matter (Federal)

Emission Limit(s): 0.30 kg/megagram (0.6 lb/ton) of stone feed

Authority for Requirement: DNR Construction Permit 91-A-324-S6

40 CFR 60 Subpart HH 567 IAC 23.1(2)"y"

Pollutant: Sulfur Dioxide (SO₂) Emission Limit(s): 39.0 tons/year (2)

(2) Emission limit for Kiln 4

Authority for Requirement: DNR Construction Permit 91-A-324-S6

567 IAC 23.3(3)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv – when combusting only gaseous fuels (i.e. natural gas and

landfill gas) (1)

(1) The sulfur dioxide limit is the stricter of 6 lb/MMBtu and 500 ppmv when using a combination of fuels

Authority for Requirement: DNR Construction Permit 91-A-324-S6

567 IAC 23.3(3)"e"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 6 lb/MMBtu – when combusting only solid fuels (i.e. coal and pet coke). (1)

(1) The sulfur dioxide limit is the stricter of 6 lb/MMBtu and 500 ppmv when using a combination of fuels

Authority for Requirement: DNR Construction Permit 91-A-324-S6

567 IAC 23.3(3)"a"(1)

Pollutant: Nitrogen Oxides (NO_x) Emission Limit(s): 39.0 tons/year (2)

(2) Emission limit for Kiln 4

Authority for Requirement: DNR Construction Permit 91-A-324-S6

Pollutant: Carbon Monoxide (CO) Emission Limit(s): 95.0 tons/year (2)

(2) Emission limit for Kiln 4

Authority for Requirement: DNR Construction Permit 91-A-324-S6

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

New Source Performance Standards (NSPS)

Kiln #4 is subject to Subpart A (General Provisions, 40 CFR §60.1 – 40 CFR §60.19) and Subpart HH (Standards of Performance for Lime Manufacturing Plants, 40 CFR §60.340 – 40 CFR §60.344) of the New Source Performance Standards (NSPS).

Authority for Requirement: 40 CFR 60 Subpart A, Subpart HH

567 IAC 23.1(2)"y"

DNR Construction Permit 91-A-324-S6

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. Operation through this emission point shall not exceed 876 hours per year on a rolling twelve-month total.
 - i. Operator personnel shall maintain a log of baghouse usage on-site. This

tabulation shall include hours of usage per day, per month, and per year. Annual hours of operation shall be determined on a rolling-12-month total.

- B. The operation of kilns 1, 2, 3, and 4 shall be operated in accordance with all conditions set forth in permit number 73-A-219-S1.
- C. This emission point is limited to the following operating scenarios:
 - i. Any of the four (4) kilns operating individually.
 - ii. Kilns 3 & 4.
- iii. Kilns 1, 2, and 3.
- iv. Kilns 1, 2, and 4.
- v. Kilns 1 & 4.
- vi. Kilns 2 & 4.
- vii. Kilns 1 & 3.
- viii. Kilns 2 & 3.
- ix. Kilns 1 & 2.
- D. The following operating limits are set forth in lieu of the continuous opacity monitoring requirements established by NSPS Subpart HH. Should the owner or operator elect to install a COM in accordance with 60 CFR §60.343, these operating limits shall be disregarded.
 - i. Should the emissions from kiln #4 be routed to the LP-9 baghouse for more than 876 hours in any consecutive twelve (12) month period, a COM shall be installed and certified on the baghouse within ninety (90) days of exceeding this time limit.
 - ii. A log shall be maintained indicating the beginning and ending dates and times that emissions from kiln #4 are routed to the LP-9 baghouse. Baghouse operating parameters, such as pressure drop, shall be recorded daily as an indicator of baghouse operation.
- iii. Visible emission observations in accordance with Method 9 shall be taken by a certified observer for at least three six (6) minute periods each day that emissions from kiln #4 are routed to the LP-9 baghouse.
- iv. The date, time, and results of the visible emission observations described in item D. iii (shown above) shall be recorded.
- v. The visible emission observations described in condition D. iii (shown above) shall be initiated at random times during each day that emissions from kiln #4 are routed to the LP-9 baghouse.
- vi. In the event that the average opacity during a six (6) minute period is greater than 15%, visible emission observations in accordance with Method 9 shall continue to be taken and recorded until such time that the average opacity of a six (6) minute period is below 15%.
- vii. Reports of excess emissions, including the information specified in 40 CFR 60.7(c), shall be submitted semiannually. For purposes of this report, periods of excess emissions that shall be reported are defined as all six (6) minute periods during which the average opacity is greater than 15%.
- E. The following operating condition monitoring is set forth in lieu of the continuous opacity monitoring requirements established by NSPS Subpart HH. Should the owner or operator elect to install a COM in accordance with 60 CFR §60.343, these recordkeeping

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requirements shall be disregarded.

- i. A log shall be maintained indicating the beginning and ending dates and times that emissions from kiln #4 are routed to the LP-9 baghouse. Baghouse operating parameters, such as pressure drop, shall be recorded daily as an indicator of baghouse operation.
- ii. Visible emission observation in accordance with Method 9 shall be taken by a certified observer for at least three six (6) minute periods each day that emissions from kiln #4 are routed to the LP-9 baghouse.
- iii. The date, time, and results of the visible emission observations required in condition D. iii (shown above), shall be recorded.
- iv. Reports of excess emissions, including the information specified in 40 CFR 60.7(c), shall be submitted semiannually.

Authority for Requirement: DNR Construction Permit 91-A-324-S6

40 CFR 60 Subpart A – 567 IAC 23.1(2)

40 CFR 60 Subpart HH 567 IAC 23.1(2)"y"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 72

Stack Opening (inches, dia): 84 Exhaust Flow Rate (scfm): 65,000 Exhaust Temperature (°F): 220

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 91-A-324-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring shall not be required at this time. In lieu of operating a COMS, the owner or operator shall comply with permit conditions D and E in Operating Limits (above). The Department reserves the right to require the installation, calibration, maintenance, and operation of a CEMS in the future as needed (i.e. in the event the applicant requests an increase in hours of operation).

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Opacity Monitoring:

When Kiln #4 is in operation:

See Operational Limits & Requirements.

When Kiln #4 is not in operation:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. The facility shall use EPA Method 9 with a certified smoke reader for the monitoring method. If an opacity > (0%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🛛 No 🗌

(See Operational Limits & Requirements for equivalent CAM language. Monitoring is only required when Kiln 4 is vented through the baghouse.)

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: LP-12

Associated Equipment

Associated Emission Unit ID Numbers: LP-12a, LP-12b, LP-12c, LP-12e, LP-12f, LP-12g, LP-

3a and LP-3b

Emissions Control Equipment ID Number: CE LP-12 Emissions Control Equipment Description: Baghouse

Table 1: Ingredients Storage Bins

Emission	Emission	Emission Unit Description	Raw Material	Rated Capacity *
Point	Unit			
LP-12	LP-12a	Hi-Cal Storage Bin	Hi-Cal Lime	165 tons of ingredient
	LP-12b	Pneumatic Blowers	Hi-Cal Lime	75 tons of ingredient/hour
	LP-12c	Hi-Cal Storage Bin	Hi-Cal Lime	50 tons of ingredient
	LP-12e	Flourspar Storage Bin	Flourspar	50 tons of ingredient
	LP-12f	Cal-Aluminate Storage Bin	Calcium-Aluminate	75 tons of ingredient
	LP-12g	Hi-Cal Storage Bin	Hi-Cal Lime	75 tons of ingredient
	LP-3a	Bagging Tank Conveyor	Ingredients	75 tons of ingredient/hour
	LP-3b	2-ton Bagger	Ingredients	20 tons of ingredient/hour

^{*} Maximum Rated Capacity: 100 Tons of ingredients per hour

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% (1)

(1) An exceedance of the indicator opacity of No Visible Emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permit 97-A-1084-S4

567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 0.05 lb/hr

Authority for Requirement: DNR Construction Permit 97-A-1084-S4

Pollutant: Particulate Matter

Emission Limit(s): 0.57 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 97-A-1084-S4

567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum amount of product conveyed to bagging shall not exceed 100 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product loaded out in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average the amount of product loaded out in tons.
- B. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition C (shown below) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- C. The differential pressure drop across Baghouse (CE LP-12) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-12). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-12), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-12) falls outside the range specified in condition C (shown above), the owner or operator shall investigate Baghouse (CE LP-12) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-12) are not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-12), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE LP-12).

Authority for Requirement: DNR Construction Permit 97-A-1084-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 65

Stack Opening (inches, dia.): 12 Exhaust Flow Rate (scfm): 3,600 Exhaust Temperature (°F): Ambient Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 97-A-1084-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
(See Operational Limits & Requirements for equivalent CAM language)	

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: LP-13

Associated Equipment

Associated Emission Unit ID Numbers: LP-13, LP-13A, LP-13B, LP-13C, LP-13D & LP-13E

Emissions Control Equipment ID Number: CE LP-13 Emissions Control Equipment Description: Baghouse

Table 1: Lime Rail Loadout System

Emission	Emission	Emission Unit Description	Raw	Rated Capacity
Point	Unit		Material	
	LP-13	Lime Rail Loadout System (Spout and belt#1)		100 tons/hr
	LP-13A	Lime Rail Loading Conveyor		100 tons/hr
LP-13	LP-13B	Tank 445 Rail Conveyor	Lime	100 tons/hr
	LP-13C	Tank 446 Rail Conveyor		100 tons/hr
	LP-13D	Tank 446 Rail Conveyor		100 tons/hr
	LP-13E	Dolo to Rail Loadout Conveyor		100 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % (1)

(1) An exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permit 02-A-028-S5

567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 0.17 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-028-S5

Pollutant: Particulate Matter

Emission Limit(s): 0.31 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 02-A-028-S5

567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum amount of lime loaded out using the rail loadout system shall not exceed 100 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product loaded out in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average of product loaded out in tons.
- B. The stack shall be raised to 50 feet from the ground within 90 days after permit issuance.
 - i. The owner or operator shall maintain a record of the completion date that stack EP LP-13 was raised to 50 feet from the ground.
- C. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition D (shown below) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- D. The differential pressure drop across Baghouse (CE LP-13) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-13). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-13), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-13) falls outside the range specified in condition D (shown above), the owner or operator shall investigate Baghouse (CE LP-13) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-13) are not in operation.
- E. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-13), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

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i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE LP-13).

- F. The owner or operator shall complete the modification of EP LP-13 to add the Dolo to Rail Loadout Conveyor (LP-13E) by May 31, 2018.
 - i. The owner or operator shall maintain a record of the completion date that the Dolo to Rail Loadout Conveyor (LP-13E) was added to EP LP-13.

Authority for Requirement: DNR Construction Permit 02-A-028-S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 50

Stack Opening (inches): 10

Exhaust Flow Rate (scfm): 1,800 Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 02-A-028-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
(See Operational Limits & Requirements for equivalent CAM language)	
Authority for Requirement: 567 IAC 22.108(3)	

Associated Equipment

Associated Emission Unit ID Numbers: EU LP-6, EU LP-16B, EU LP-16C, EU LP-16S

Emissions Control Equipment ID Number: CE LP-16 Emissions Control Equipment Description: Baghouse

Table 1: Dolo Processing System

Emission	Emission	Emission Unit Description	Raw Material	Rated Capacity *
Point	Unit			
	LP-6	Dolo Process Loading Spout		40 tons/hr
	LP-16B	Dolo Process Bins 5 bins combined		400 tons of lime
LP-16	LP-16C	Dolo Process Conveying (15 conveyors/screws/elevators)	Lime/Dolomite	45 tons/hr
	LP-16S	Dolo Process Screener and Crusher (screener, Briquetter and crusher)		45 tons/hr

^{*} Maximum Rated Capacity: 90,000 lbs per hour of dolomite

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % (1)

(1) An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing)

Authority for Requirement: DNR Construction Permit 11-A-335-S3

567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 0.82 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-335-S3

Pollutant: Particulate Matter

Emission Limit(s): 0.82 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-335-S3

567 IAC 23.3(2)"a"

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum production rate of dolo processing system shall not exceed 90,000 pounds per hour averaged over 6-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product loaded, using the belt scale, in pounds.
 - ii. The owner or operator shall maintain records of the 6-hour average of product loaded, using the belt scale, in pounds.
- B. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition C (shown below) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- C. The differential pressure drop across Baghouse (CE LP-16) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-16). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-16), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-16) falls outside the range specified in condition C (shown above), the owner or operator shall investigate Baghouse (CE LP-16) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-16) are not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-16), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE LP-16).

Authority for Requirement: DNR Construction Permit 11-A-335-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 60

Stack Opening (inches): 24

Exhaust Flow Rate (scfm): 9,000 Exhaust Temperature (°F): 90

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 11-A-335-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

(See Operational Limits & Requirements for equivalent CAM language)

Associated Equipment

Associated Emission Unit ID Numbers: EU LP-17, EU LP-17-1, EU LP-17-2, EU LP-17-4,

EU LP-1Q & EU LP-1R

Emissions Control Equipment ID Number: CE LP-17 Emissions Control Equipment Description: Baghouse

Table 1: Dolo Storage and Truck Loadout System

Emission	Emission	Emission Unit Description	Raw Material	Rated Capacity *
Point	Unit			
	LP-17	Dolo Truck Loading Spout		100 tons/hr
	LP-17-1	Dolo Loadout Conveyor #1 (Rail & Truck)		100 tons/hr
LP-17	LP-17-2	Dolo Loadout Conveyor #2	Lime/Dolomite	100 tons/hr
	LP-17-4	Bathtub Bins (5 total)		80 tons/hr
	LP-1Q	C352 Dolo Belt to Loadout		50 tons/hr
	LP-1R	C353 Dolo Drag Conveyor		50 tons/hr

^{*} Maximum Rated Capacity: 100 tons of dolomite per hour

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % (1)

(1) An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permit 11-A-336-S3

567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 0.94 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-336-S3

Pollutant: Particulate Matter

Emission Limit(s): 1.0 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-336-S3

567 IAC 23.3(2)"a"

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The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum amount of dolo loaded out using the dolo loadout system shall not exceed 100 tons per hour averaged over 6-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product loaded out in tons.
 - ii. The owner or operator shall maintain records of the 6-hour average of product loaded out in tons.
- B. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition C (shown below) by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- C. The differential pressure drop across Baghouse (CE LP-17) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-17). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-17), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-17) falls outside the range specified in condition C (shown above), the owner or operator shall investigate Baghouse (CE LP-17) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-17) are not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-17), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE LP-17).
- E. The owner or operator shall decommission loadout EP LP-17B (Bathtub) by May 1, 2018.

i. The owner or operator shall maintain a record of the date when EP LP-17B was decommissioned from use.

Authority for Requirement: DNR Construction Permit 11-A-336-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 90

Stack Opening (inches): 36 Exhaust Flow Rate (scfm): 6,400 Exhaust Temperature (°F): 200

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 11-A-336-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
(See Operational Limits & Requirements for equivalent CAM language)	
Authority for Requirement: 567 IAC 22.108(3)	

Emission Point ID Number: Solid Fuel-01

Associated Equipment

Associated Emission Unit ID Numbers: Solid Fuel-01

Emissions Control Equipment ID Number: NA

Emissions Control Equipment Description: Hoop Building (83% enclosure)

Table 1: Solid Fuel Pile

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity
Solid Fuel-01	Solid Fuel Pile	Solid Fuel (Coal)	61,000 TPY of Solid Fuel

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): See Footnote (1)

(1) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 17-A-504-S1

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s): 0.0079 lbs/day (2)

(2) The limit for PM10 emissions is established at 0.0079 pounds of PM10 per day estimated using 10.18% moisture

for the pile.

Authority for Requirement: DNR Construction Permit 17-A-504-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum amount of solid fuel stored in the solid fuel pile shall not exceed 61,000 tons per rolling 12-month period.
 - i. The owner or operator shall maintain monthly records of the amount of solid fuel

stored in the solid fuel pile. Calculate and record the 12-month rolling totals.

- B. The owner or operator shall check for visible emissions from the solid fuel pile (EP Solid Fuel-01) once per day at a time while the pile is in use. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from solid fuel pile, the owner or operator shall investigate the enclosure. The owner or operator shall maintain a record of all corrective actions taken.
- C. The owner or operator shall develop an operating and maintenance plan for the building structure, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- D. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the building structure.

Authority for Requirement: DNR Construction Permit 17-A-504-S1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🔀
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🗵
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🗵

Associated Equipment

Associated Emission Unit ID Numbers: LP-20

Table 1: Solid Fuel Hopper

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity
LP-20	LP-20	Solid Fuel Hopper	Solid Fuel	70 TPH of Solid Fuel; 300 Tons Per day of Solid Fuel; 61,000 TPY of Solid Fuel

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% (1)

(1) An exceedance of the indicator opacity of No Visible Emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permit 17-A-495-S1

567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 0.02 lbs/hr

Authority for Requirement: DNR Construction Permit 17-A-495-S1

Pollutant: PM

Emission Limit(s): 0.04 lbs/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-495-567

IAC 23.3(2)"a"

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum amount of solid fuel transferred through the hopper shall not exceed 70 tons per hour
 - i. For each hour, the owner or operator shall maintain records of the amount of product transferred in tons.
 - ii. The owner or operator shall maintain hourly records of the product transferred in tons.
- B. The maximum amount of solid fuel transferred through the hopper shall not exceed 300 tons per day.
 - i. For each day, the owner or operator shall maintain records of the amount of solid fuel transferred through the hopper in tons.
 - ii. The owner or operator shall maintain daily records of the solid fuel transferred in tons.
- C. The owner or operator shall check for visible emissions from Solid Fuel Hopper (EP LP-20) once per day at a time while Solid Fuel Hopper (EP LP-20) is in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from Solid Fuel Hopper (EP LP-20), the owner or operator shall investigate the emission unit or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Solid Fuel Hopper (EP LP-20) is not in operation.

Authority for Requirement: DNR Construction Permit 17-A-495-S1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes No No

Associated Equipment

Associated Emission Unit ID Numbers: EU LP-39, EU LP-39A

Emissions Control Equipment ID Number: CE LP-39 Emissions Control Equipment Description: Baghouse

Table 1: Solid Fuel Crusher/Burner System

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity
	LP-39	Solid Fuel Crusher		20 tons per hour*
LP-39	LP-39A	Crusher Burner	Solid Fuel	7 MMBtu per hour

^{*} Process design capacity: 11 tons per hour

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % (1)

(1) An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permit 17-A-505-S2

567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 0.86 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-505-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.86 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-505-S2

567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂) Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 17-A-505-S2

567 IAC 23.3(3)

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The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept onsite for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum amount of solid fuel crushed in the crusher shall not exceed 11 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of solid fuel crushed in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average of solid fuel crushed in tons.
- B. The burner shall be fueled by natural gas only.
 - i. The owner or operator shall maintain records of the type of fuel combusted in the burner.
- C. The facility shall not crush any other fuel besides coke/coal in the fuel crusher.
 - i. The owner or operator shall maintain records of the type of fuel crushed in the crusher.
- D. The owner or operator shall begin monitoring the differential pressure drop across the baghouse, as specified in condition 5.E. by May 1, 2018.
 - i. The owner or operator shall maintain a record of the commencement date of the differential pressure drop monitoring of the control equipment.
- E. The differential pressure drop across Baghouse (CE LP-39) shall be maintained between 2 and 10 inches of water column, based on 1-hr block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE LP-39). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE LP-39), in inches of water, at a minimum of once every 2 minutes. Calculate and record the hourly average for all readings for each 1-hour block. If the average hourly pressure drop across Baghouse (CE LP-39) falls outside the range specified in Condition 5.E., the owner or operator shall investigate Baghouse (CE LP-39) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE LP-39) are not in operation.
- F. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE LP-39), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and

any action resulting from the inspection and maintenance of the Baghouse (CE LP-39).

Authority for Requirement: DNR Construction Permit 17-A-505-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 50

Stack Opening (inches): 21

Exhaust Flow Rate (scfm): 6,500 Exhaust Temperature (°F): 175

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-505-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes ☐ No ⊠

Associated Equipment

Associated Emission Unit ID Numbers: EU LP-21, EU LP-25

Table 1: Solid Fuel Conveyor System

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity
I D 24	LP-21	Kilns Solid Fuel Conveyor	0.1.12.1/0.1)	70 TPH; 300 Tons Per day of Solid Fuel
LP-24	LP-25	Kilns Solid Fuel Tank	Solid Fuel (Coal)	300 Tons Per day of Solid Fuel

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % (1)

(1) An exceedance of the indicator opacity of No Visible Emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permit 17-A-494-S1

567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 0.08 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-494-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.20 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-494-S1

567 IAC 23.3(2)"a"

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum amount of solid fuel conveyed through the conveyor shall not exceed 70 tons per hour.
 - i. For each hour, the owner or operator shall maintain records of the amount of solid fuel conveyed through the conveyor in tons.
 - ii. The owner or operator shall maintain hourly records of the solid fuel conveyed in tons.
- B. The maximum amount of solid fuel conveyed through the conveyor shall not exceed 300 tons per day. The maximum amount of solid fuel stored in the tank shall not exceed 300 tons per day.
 - i. For each day, the owner or operator shall maintain records of the amount of solid fuel conveyed through the conveyor in tons and stored in the tank in tons.
 - ii. The owner or operator shall maintain daily records of the solid fuel conveyed and stored in tons.
- C. The owner or operator shall check for visible emissions from Solid Fuel Conveyor (EP LP-24) once per day at a time while Solid Fuel Conveyor (EP LP-24) is in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from Solid Fuel Conveyor (EP LP-24), the owner or operator shall investigate the emission unit or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Solid Fuel Conveyor (EP LP-24) is not in operation.

Authority for Requirement: DNR Construction Permit 17-A-494-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 70 Stack Opening (inches): 32 x 32 Exhaust Flow Rate (scfm): 11.7 Exhaust Temperature (°F): Ambient Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-494-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes No No
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Associated Equipment

Associated Emission Unit ID Numbers: EU LP-36, EU LP-37

Table 1: Kiln #3 System

Emission	Emission	Emission Unit Description	Raw Material	Rated Capacity
Point	Unit			
LP-36	LP-36	Kiln # 3 Rockbox Conveyor	Limastona	70 tons/hr
LF-30	LP-37	Kiln # 3 Rockbox	Limestone	70 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % (1)

(1) An exceedance of the indicator opacity of No Visible Emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permit 17-A-491

567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 0.08 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-491

Pollutant: Particulate Matter

Emission Limit(s): 0.21 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-491

567 IAC 23.3(2)"a"

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum amount of product conveyed using kiln#3 conveyor shall not exceed 70 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product conveyed in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average the amount of product conveyed in tons.
- B. The owner or operator shall check for visible emissions from Kiln #3 Rockbox and Conveyor (EP LP-36) once per week at a time while Kiln #3 Rockbox and Conveyor (EP LP-36) is in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from Kiln #3 Rockbox and Conveyor (EP LP-36), the owner or operator shall investigate the emission unit or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Kiln #3 Rockbox and Conveyor (EP LP-36) is not in operation.

Authority for Requirement: DNR Construction Permit 17-A-491

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 76 Stack Opening (inches): 32 x 32 Exhaust Flow Rate (scfm): 290 Exhaust Temperature (°F): Ambient Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-491

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

JHW 91 04-TV-005R2, 9/3/2019

Monitoring Requirements	
The owner/operator of this equipment shall comply with the monito below.	ring requirements listed
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Associated Equipment

Associated Emission Unit ID Numbers: EU LP-38, EU LP-52 & EU LP-40

Table 1: Kiln #1 & #2 Rockbox and Conveyor System

Emission	Emission	Emission Unit Description	Raw Material	Rated Capacity
Point	Unit			
	LP-38	Kiln #1, 2 Rockbox Conveyor		55 tons/hr
LP-38	LP-52	Kiln #1 Rockbox	Limestone	55 tons/hr
	LP-40	Kiln #2 Rockbox		55 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 % (1)

(1) An exceedance of the indicator opacity of No Visible Emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: DNR Construction Permit 17-A-492

567 IAC 23.3(2)"d"

Pollutant: PM-10

Emission Limit(s): 0.061 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-492

Pollutant: Particulate Matter

Emission Limit(s): 0.165 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-492

567 IAC 23.3(2)"a"

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The maximum amount of product conveyed using Kiln #1, 2 Rockbox Conveyor shall not exceed 55 tons per hour averaged over 3-hr period.
 - i. For each hour, the owner or operator shall maintain records of the amount of product conveyed in tons.
 - ii. The owner or operator shall maintain records of the 3-hour average the amount of product conveyed in tons.
- B. The owner or operator shall check for visible emissions from Kiln #1 & #2 Rockbox and Conveyor (EP LP-38) once per week at a time while Kiln #1 & #2 Rockbox and Conveyor (EP LP-38) is in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from Kiln #1 & #2 Rockbox and Conveyor (EP LP-38), the owner or operator shall investigate the emission unit or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Kiln #1 & #2 Rockbox and Conveyor (EP LP-38) is not in operation.

Authority for Requirement: DNR Construction Permit 17-A-492

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft. from the ground): 76 Stack Opening (inches): 32 x 32 Exhaust Flow Rate (scfm): 80 Exhaust Temperature (°F): Ambient Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-492

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department

within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

 Agency Approved Operation & Maintenance Plan Required?
 Yes □ No ⋈

 Facility Maintained Operation & Maintenance Plan Required?
 Yes □ No ⋈

 Compliance Assurance Monitoring (CAM) Plan Required?
 Yes □ No ⋈

Associated Equipment

Associated Emission Unit ID Numbers: Q-1, Q1C1, Q1C2

Emissions Control Equipment ID Number: WSQ1

Emissions Control Equipment Description: Water Suppression

Emission Unit vented through this Emission Point: Q-1

Emission Unit Description: Q-1, Primary Crushing; Q1C1, Conveyor #1; Q1C2, Stacker;

Pile 6 (in pit)

Raw Material/Fuel: Limestone

Rated Capacity: 700 tons/hour each; maximum pile area: 26,685 ft²

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity for Q1 Crusher and Q1 Conveyor #1

Emission Limit(s): Fugitive (1)

(1) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 11-A-337-S1

567 IAC 23.3(2)"c"

Pollutant: Opacity for Quarry 1 Stacker and Pile 6

Emission Limit(s): Fugitive (1)

(1) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 11-A-337-S1

567 IAC 23.3(2)"c"

Pollutant: Opacity for NSPS OOO, Q-1 Stacker

Emission Limit(s): 7% (2)

(2) Limit established per Table 3 of Subpart OOO Part 60.

Authority for Requirement: DNR Construction Permit 11-A-337-S1

567 IAC 23.1(2)"bbb"

Pollutant: PM-10 for Q-1 Crusher and Q-1 Belt #1

Emission Limit(s): 9.84 lbs/day

Authority for Requirement: DNR Construction Permit 11-A-337-S1

Pollutant: PM-10 for Quarry 1 Stacker and Pile 6

Emission Limit(s): 10.64 lbs/day

Authority for Requirement: DNR Construction Permit 11-A-337-S1

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall operate water suppression system when visible emissions from processing units Q-1 Crusher, Q-1 Conveyor#1 or Q-1 Stacker are observed.
- B. The owner or operator shall check for visible emissions each time the processing units Q-1 Crusher, Q-1 Conveyor#1 and Q-1 Stacker are in operation. This requirement shall not apply on the days that processing units Q-1 Crusher, Q-1 Conveyor#1 and Q-1 Stacker are not in operation.
 - i. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions.
 - ii. If the owner or operator observes visible emissions during operation of processing units Q-1 Crusher, Q-1 Conveyor#1 and Q-1 Stacker, the owner or operator shall investigate the emission unit, or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken.
- C. The owner or operator shall develop an operating and maintenance plan for the water suppression system, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the water suppression system.
- D. The owner or operator shall maintain the total area of Pile 6 to less than or equal to 26,685 square feet.
 - i. The owner or operator shall maintain annual record of Pile 6 area in square feet.
- E. During high wind episodes (greater than 16 miles per hour) if visible emissions are observed from the working face of Pile 6, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement, at a minimum, measures to minimize emissions during high wind episodes as specified in condition E of Operating Requirements (above). The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.

F. The owner or operator shall comply with the requirements per 40 CFR §60.670 through §60.676 for Q-1 Stacker.

Authority for Requirement: DNR Construction Permit 11-A-337-S1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?

Yes No Compliance Assurance Monitoring (CAM) Plan Required?

Yes No Compliance No Compliance Plan Required?

Associated Equipment

Associated Emission Units ID Numbers: See Table 1 Emissions Control Equipment ID Number: CE Q2LP

Emissions Control Equipment Description: Water Suppression on LP1 Screen and LP1 Crusher

Emission Units vented through this Emission Point: See Table 1

Emission Units Description: Secondary Crushing/Screening – Lower Plant

Raw Material/Fuel: Limestone

Rated Capacity: 300 TPH; Recycle rate 100 TPH

Applicable Requirements

Table 1: Q-2LP Secondary Crushing/Screening – Lower Plant

Emission Unit	Maximum Capacity	Control
LP1 Belt	400 tons per hour	None
LP1 Screen	400 tons per hour	None
LP1 Crusher	100 tons per hour	None
LP6 Belt	100 tons per hour	None
LP9 Belt	100 tons per hour	None
LP4A Belt	75 tons per hour	None
LP2 screen	100 tons per hour	None
LP4 Stacker	75 tons per hour	None
LP3 Stacker	125 tons per hour	None
LP5 Stacker	40 tons per hour	None
LP8 Stacker	60 tons per hour	None
Pile 7 (In pit)	Maximum Pile Area: 19,461 ft ²	None

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Emission Limits (Q-2LP Crusher and Other Equipment)

Pollutant: Opacity

Emission Limit: Fugitive Dust (1)

Authority for Requirement: DNR Construction Permit 18-A-112-S1

567 IAC 23.3(2)"c"

The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Pollutant: PM-10

Emission Limit(s): 127.92 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-112-S1

Emission Limits (Stackers and Pile 7)

Pollutant: Opacity

Emission Limit: Fugitive Dust (1)

(1) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive

dusts beyond lot line of the property (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 18-A-112-S1

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s): 9.36 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-112-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall check for visible emissions each time the processing units listed in Emission Point Characteristics are in operation. This requirement shall not apply on the days that processing units listed in Emission Point Characteristics are not in operation.
 - iii. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions.
 - iv. If the owner or operator observes visible emissions during operation of processing units listed in Emission Point Characteristics, the owner or operator shall investigate the emission unit, or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken.
- B. The owner or operator shall maintain the total area of Pile 7 to less than or equal to 19,461 square feet.
 - ii. The owner or operator shall maintain annual records of Pile 7 area in square feet.
- C. The owner or operator shall check for visible emissions from the equipment operating within Pile 7 once per day at a time while the equipment is in use.
 - i. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the equipment with the piles, the owner or operator shall investigate the emission unit or operations associated with the emission unit and

make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that processing units located within the pile are not in operation.

- D. During high wind episodes (greater than 16 miles per hour) if visible emissions are observed from the working face of Pile 7, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement, at a minimum, measures to minimize emissions during high wind episodes as specified in condition D (shown above). The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.

Authority for Requirement: DNR Construction Permit 18-A-112-S1

Monitoring Requirements	
The owner/operator of this equipment shall comply with the monitoring	g requirements listed
below.	🗆 🖂
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
Authority for Requirement: 567 IAC 22.108(3)	

Emission Point ID Number: Q-2TP

Associated Equipment

Associated Emission Unit ID Numbers: See Table 1 Emissions Control Equipment ID Number: CE Q2TP

Emissions Control Equipment Description: Water Suppression

Applicable Requirements

Emission Unit vented through this Emission Point: See Table 1 Emission Unit Description: Quarry 2TP Equipment and Pile 4

Raw Material/Fuel: Limestone Rated Capacity: 400 tons/hour

Table 1: Q-2TP Secondary Crushing/Screening – Top Plant

Emission Unit	Maximum Capacity	Control
TP1a Belt	400 tons/hr	Water Suppression
TP1b Belt	400 tons/hr	Water Suppression
TP2 Belt	425 tons/hr	Water Suppression
TP1 N Screen	212 tons/hr	Water Suppression
TP1 S Screen	213 tons/hr	Water Suppression
TP3 Crusher Belt	25 tons/hr	Water Suppression
TP1 Crusher	25 tons/hr	Water Suppression
TP4 Crusher Return Belt	25 tons/hr	Water Suppression
TP6 Cross Belt	325 tons/hr	Water Suppression
TP8 Belt	325 tons/hr	Water Suppression
TP3 West Screen	150 tons/hr	Water Suppression
TP4 East Screen	175 tons/hr	Water Suppression
TP9 Belt	125 tons/hr	Water Suppression
TP11 Belt	125 tons/hr	Water Suppression
TP14 Belt Washer	100 tons/hr	Water Suppression
TP12 Belt	50 tons/hr	Water Suppression
TP17 Belt	50 tons/hr	Water Suppression
TP6 PEP Screen	50 tons/hr	Water Suppression
TP5 Sugarbeet Stacker	100 tons/hr	None
TP16 Belt Stacker (wet material	100 tons/hr	None
processed)		
TP18 Stacker (wet material processed)	25 tons/hr	None
TP19 Stacker (wet material processed)	25 tons/hr	None
Pile 4	Maximum Pile Area: 47,468 ft ²	None

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Emission Limits (Q2TP equipment)

Pollutant: Opacity

Emission Limit: Fugitive Dust (1)

(2) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 18-A-113

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s): 18.96 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-113

Emission Limits (Stackers and Pile 4)

Pollutant: Opacity

Emission Limit: Fugitive Dust (1)

(1) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 18-A-113

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s): 13.44 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-113

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall operate water suppression system when visible emissions from processing units listed in Table 1 (above) are observed.
- B. The owner or operator shall check for visible emissions each time the processing units listed in Table 1 (above). This requirement shall not apply on the days that processing units listed in Table 1 (above) are not in operation.
 - v. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions.

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- vi. If the owner or operator observes visible emissions during operation of processing units listed in Table 1 (above), the owner or operator shall investigate the emission unit, or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken.
- C. The owner or operator shall develop an operating and maintenance plan for the water suppression system, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the water suppression system.
- D. The owner or operator shall maintain the total area of Pile 4 to less than or equal to 47,468 square feet.
 - i. The owner or operator shall maintain annual records of pile 4 area in square feet.
- E. The average active surface moisture content for the material storage pile 4 shall be greater than or equal to 2.1% by weight.
 - i. The owner or operator shall sample the active surface of storage pile 4 to determine moisture content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average moisture content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured moisture content as percent weight d); The average moisture content as percent by weight and e) The operator's initials.
- F. The average active surface silt from the material storage pile 4 shall be less than or equal to 3.9% by weight.
 - i. The owner or operator shall sample the active surface of storage pile 4 to determine silt content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average silt content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured silt content as percent weight d); The average silt content as percent by weight and e) The operator's initials.
- G. During high wind episodes (greater than 12 miles per hour) if visible emissions are observed from the working face of Pile 4 the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.

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i. The owner or operator shall develop a written plan to implement, at a minimum,

measures to minimize emissions during high wind episodes as specified in Table 1 (above). The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.

- H. The owner or operator shall only process wet material in TP16 Belt Stacker, TP18 Stacker, and TP19 Stacker.
 - i. The owner or operator shall maintain a record if non-wet material is processed in TP16 Belt Stacker, TP18 Stacker, and TP19 Stacker.

Authority for Requirement: DNR Construction Permit 18-A-113

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM ₁₀	Active Surface Silt & Moisture Sampling	Quarterly	NA	AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading, Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples

Sampling to be completed:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

Authority for Requirement: DNR Construction Pe	ermit 18-A-113	
Agency Approved Operation & Maintenance Pla	n Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance F	lan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan	Required?	Yes 🗌 No 🖂
Authority for Requirement: 567 IAC 22.108(3)		

Emission Point ID Number: Pile 1 and 11

Associated Equipment

Associated Emission Unit ID Numbers: Pile 1 and 11

Applicable Requirements

Emission Unit vented through this Emission Point: Pile 1 and 11

Emission Unit Description: Storage Piles

Raw Material/Fuel: Limestone

Rated Capacity: NA

Table 1: Pile 1 and 11

Emission Unit	Maximum Capacity	Control
Pile 1	Maximum Pile Area: 80,318 ft ²	None
Pile 11	Maximum Pile Area: 33,485 ft ²	None

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: Fugitive Dust (1)

(1) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 18-A-114

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s): 8.65 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-114

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall maintain the total area of Pile 1 to less than or equal to 80,318 square feet.
 - i. The owner or operator shall maintain annual records of Pile 1 area in square feet.

- B. The average active surface moisture content for the material storage pile 1 shall be greater than or equal to 1.2% by weight.
 - i. The owner or operator shall sample the active surface of storage pile 1 to determine moisture content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average moisture content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured moisture content as percent weight d); The average moisture content as percent by weight and e) The operator's initials
- C. The average active surface silt from the material storage pile 1 shall be less than or equal to 0.23% by weight.
 - i. The owner or operator shall sample the active surface of storage pile 1 to determine silt content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average silt content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured silt content as percent weight d); The average silt content as percent by weight and e) The operator's initials.
- D. The owner or operator shall maintain the total area of Pile 11 to less than or equal to 33,485 square feet.
 - i. The owner or operator shall maintain annual records of Pile 11 area in square feet.
- E. The average active surface moisture content for the material storage pile 11 shall be greater than or equal to 2.1% by weight.
 - i. The owner or operator shall sample the active surface of storage pile 11 to determine moisture content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average moisture content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured moisture content as percent weight d); The average moisture content as percent by weight and e) The operator's initials.
- F. The average active surface silt from the material storage pile 11 shall be less than or equal to 3.9% by weight.
 - i. The owner or operator shall sample the active surface of storage pile 11 to determine silt content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per

- calendar quarter.
- iii. The owner or operator shall determine the average silt content as percent by weight for all samples taken per calendar quarter.
- iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured silt content as percent weight d); The average silt content as percent by weight and e) The operator's initials.
- G. During high wind episodes (greater than 12 miles per hour) if visible emissions are observed from the working face of Piles 1 or 11, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement, at a minimum, measures to minimize emissions during high wind episodes as specified in condition G (shown above). The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.

Authority for Requirement: DNR Construction Permit 18-A-114

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Pollu	utant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM ₁₀)	Active Surface Silt & Moisture Sampling	Quarterly	NA	AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading, Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples

Sampling to be completed:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

Authority for Requirement: DNR Construction Permit 18-A-114

Agency Approved Operation & Maintenance Plan Required?	Yes No No
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: Pile 8

<u>Associated Equipment</u>

Associated Emission Unit ID Numbers: Pile 8

Applicable Requirements

Emission Unit vented through this Emission Point: Pile 8

Emission Unit Description: Material Storage Pile

Raw Material/Fuel: Washed Limestone

Rated Capacity: NA

Table 1: Pile 8

Emission Unit	Maximum Capacity	Control
Pile 8	Maximum Pile Area: 183,860 ft ²	None

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: Fugitive Dust (1)

(1) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property. (See Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 18-A-115

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s): 3.82 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-115

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall maintain the total area of Pile 8 to less than or equal to 183,860 square feet.
 - i. The owner or operator shall maintain annual records of Pile 8 area in square feet.

- B. The owner or operator shall store washed rocks only in Pile 8.
 - i. The owner or operator shall maintain records of type of rock stored in Pile 8.
- C. During high wind episodes (greater than 12 miles per hour) if visible emissions are observed from the working face of Pile 8, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement at a minimum measures to minimize emissions during high wind episodes as specified in condition C (above). The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.

Authority for Requirement: DNR Construction Permit 18-A-115

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: Pile 14

Associated Equipment

Associated Emission Unit ID Numbers: Pile 14

Applicable Requirements

Emission Unit vented through this Emission Point: Pile 14

Emission Unit Description: Material Storage Pile

Raw Material/Fuel: Limestone

Rated Capacity: NA

Table 1: Pile 14

Emission Unit	Maximum Capacity	Control
Pile 14	Maximum Pile Area: 347,974 ft ²	None

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: Fugitive Dust (1)

The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property. (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 18-A-116

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s): 6.02 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-116

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The owner or operator shall maintain the total area of Pile 14 to less than or equal to 347,974 square feet.

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- i. The owner or operator shall maintain annual records of Pile 14 area in square feet.
- B. The average active surface moisture content for the material storage pile 14 shall be greater than or equal to 1.4% by weight.
 - i. The owner or operator shall sample the active surface of storage pile 14 to determine moisture content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average moisture content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured moisture content as percent weight d); The average moisture content as percent by weight and e) The operator's initials
- C. The average active surface silt from the material storage pile 14 shall be less than or equal to 1.04% by weight.
 - i. The owner or operator shall sample the active surface of storage pile 14 to determine silt content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average silt content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured silt content as percent weight d); The average silt content as percent by weight and e) The operator's initials.
- D. During high wind episodes (greater than 12 miles per hour) if visible emissions are observed from the working face of Pile 14, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement at a minimum measures to minimize emissions during high wind episodes as specified in condition D (above). The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.

Authority for Requirement: DNR Construction Permit 18-A-116

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM_{10}	Active Surface Silt & Moisture Sampling	Quarterly	NA	AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading, Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples

Sampling to be completed:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

Authority for Requirement: DNR Construction Permit 18-A-116	
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂
Authority for Requirement: 567 IAC 22.108(3)	

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Emission Point ID Number: Pile A

Associated Equipment

Associated Emission Unit ID Numbers: Material Storage Piles Barge, B, E, H

Emissions Control Equipment ID Number: NA

Emissions Control Equipment Description: Windscreen (Pile B & E) and

Water Suppression (Pile B)

Emission Unit vented through this Emission Point: Material Storage Piles Barge, B, E, H

Emission Unit Description: Material Storage Piles

Raw Material/Fuel: Limestone

Rated Capacity (Square Feet): See Table 1

Table 1: Material Storage Pile A (Piles Barge, B, E, H)

Emission Unit	Area (Square Feet)	Throughput (tpy)
Pile Barge	244,618	750,000
Pile B*	131,097	650,000
Pile E	240,554	500,000
Pile H	116,627	20,000

^{*} Pile B includes the following units:

Kiln 4 Screener (LP-29) (Rated 50.31 tons per hour) [95% enclosed] Kiln 1, 2, 3 Screener (LP-35) (Rated 43.13 tons per hour) [95% enclosed] Stackers under (LP-30) (Rated 50.31 tons per hour) Conveyor (LP-34) (Rated 43.13 tons per hour)

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: Fugitive Dust (1)

(1) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property. (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 18-A-117-S1

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s): 180.0 lbs/day

Authority for Requirement: DNR Construction Permit 18-A-117-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall maintain the area of merged Pile A (includes Barge, B, E, and H Piles), in square feet to less than or equal to 1,729,849.
 - i. The owner or operator shall maintain annual records of pile area in square feet.
- B. The owner or operator shall maintain the throughput of Pile B in tons, on a daily basis, to less than or equal to 2238.
 - i. The owner or operator shall maintain daily records of pile throughput in tons.
- C. The owner or operator shall maintain the throughput of Pile E in tons, on a daily basis, to less than or equal to 2640.
 - i. The owner or operator shall maintain daily records of pile throughput in tons.
- D. The owner or operator shall install a windscreen on 5 loadout hoppers within Pile B and Pile E by October 1, 2018.
 - i. The owner or operator shall maintain a record of the date when installation of windscreen is completed.
- E. The owner or operator shall maintain the windscreen in a manner to minimize emissions and achieve 50 percent reduction in emissions due to loadout of material from Pile B and Pile E loadout hopper. The windscreen shall at minimum be enclosed on three sides, at a height of 5 feet above the hopper and maintained in good working order.
 - i. The owner or operator shall develop an operating and maintenance plan for the Pile B and Pile E loadout hopper windscreen, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pile B and Pile E loadout hopper windscreen.
- F. The owner or operator shall operate water suppression system when visible emissions from processing units located in Pile B are observed except when the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35° F (1.7° C) or conditions due to weather could create hazardous conditions.
- G. The owner or operator shall check for visible emissions each time the processing units located in Pile B are in operation. This requirement shall not apply on the days that processing units located in Pile B are not in operation.

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- i. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions.
- ii. If the owner or operator observes visible emissions, the owner or operator shall investigate the emission unit, or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken.
- H. The owner or operator shall develop an operating and maintenance plan for the water suppression system, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the water suppression system.
- I. The owner or operator shall check for visible emissions from the equipment operating within Pile Barge and Pile E once per day at a time while the equipment is in use.
 - i. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the equipment with the piles, the owner or operator shall investigate the emission unit or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that processing units located within the pile are not in operation.
- J. During high wind episodes (greater than 12 miles per hour) if visible emissions are observed from the working face of Pile Barge, Pile B, Pile E, or Pile H, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures shall include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - The owner or operator shall develop a written plan to implement, at a minimum, measures to minimize emissions during high wind episodes as specified in condition 5.J. The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.
- K. The average active surface moisture content for the material storage pile Barge shall be greater than or equal to 2.1% by weight.
 - i. The owner or operator shall sample the active surface of storage pile Barge to determine moisture content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average moisture content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured moisture content as percent weight d); The average moisture content as percent by weight and e) The operator's initials
- L. The average active surface silt from the material storage pile Barge shall be less than or equal to 3.9% by weight.

- i. The owner or operator shall sample the active surface of storage pile Barge to determine silt content as percent by weight once per calendar quarter.
- ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
- iii. The owner or operator shall determine the average silt content as percent by weight for all samples taken per calendar quarter.
- iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured silt content as percent weight d); The average silt content as percent by weight and e) The operator's initials.
- M. The average active surface moisture content for the material storage pile B shall be greater than or equal to 0.4% by weight.
 - i. The owner or operator shall sample the active surface of storage pile B to determine moisture content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average moisture content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured moisture content as percent weight d); The average moisture content as percent by weight and e) The operator's initials.
- N. The average active surface silt from the material storage pile B shall be less than or equal to 0.56% by weight.
 - i. The owner or operator shall sample the active surface of storage pile B to determine silt content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average silt content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured silt content as percent weight d); The average silt content as percent by weight and e) The operator's initials.
- O. The average active surface moisture content for the material storage pile E shall be greater than or equal to 1.6% by weight.
 - i. The owner or operator shall sample the active surface of storage pile E to determine moisture content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average moisture content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The

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measured moisture content as percent weight d); The average moisture content as percent by weight and e) The operator's initials.

- P. The average active surface silt from the material storage pile E shall be less than or equal to 3.95% by weight.
 - i. The owner or operator shall sample the active surface of storage pile E to determine silt content as percent by weight once per calendar quarter.
 - ii. The owner or operator shall take a minimum of two active surface samples per calendar quarter.
 - iii. The owner or operator shall determine the average silt content as percent by weight for all samples taken per calendar quarter.
 - iv. On quarterly basis, the owner or operator shall maintain the following records for each sampling event a) The date of the sample; b) The sample location; c) The measured silt content as percent weight d); The average silt content as percent by weight and e) The operator's initials.
- Q. Beginning June 30, 2019, the owner or operator shall maintain Pile Barge, Pile B, and Pile E a minimum distance of 80 feet from the fence line along highway 22.
 - i. The owner or operator shall maintain records of the date when Pile Barge, Pile B and Pile E were setback 80 feet from the fence line along highway 22.
 - ii. The owner or operator shall maintain annual records of the distance from the fence line along highway 22 for Pile Barge, Pile B and Pile E.
- R. The owner or operator shall install an enclosed building structure to utilize 95 percent reduction of particulate emissions generated, by June 30, 2019, at:
 - i. Kiln 4 Screener (LP-29)
 - ii. Kiln 1, 2, 3 Screener (LP-35)
 - iii. The owner or operator shall maintain records of the completion date for the building enclosure on Kiln 4 Screener (LP-29) and Kiln 4 Screener (LP-29).
- S. The owner or operator shall develop an operating and maintenance plan for the building structure, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the building structure.
- T. The owner or operator shall maintain equipment to ensure 24-hour surveillance of all gaps in the property berm along the river boundaries. "No Trespassing" signs shall be posted at both ends of the gap in the property berm coverage to further restrict public access.
- U. The owner or operator shall maintain a fence along all property lines except as specified in condition T (above) to restrict public access to the facility's property.
- V. The owner or operator shall install and maintain signage to restrict public access from the landfill to Linwood property by June 30, 2019.

Authority for Requirement: DNR Construction Permit 18-A-117-S1

Emission Point Characteristics

Description of units covered by this permit:

EP ID		Area (square feet)	Throughp ut (tpy)	Load In/Load out (Moisture %)	Wind Erosion (Silt Loading %)	Control (Load out) (% reduction)	Control (load in) (% reduction)	Notes
Pile A (Piles Barg e, B, E, H)	Pile Barge	244,618	750,000	2.1	3.9			50/ -f
	Pile B	131,097	650,000	0.4	0.56	Windscreen s on Pile B, E (50%)	Water Suppression on Pile B (75% reduction)	of each pile is active working
	Pile E	240,554	500,000	1.6	3.95	_		face
	Pile H	116,627	20,000	2.1	3.9		No load in	-

Pile B includes the following units:

Kiln 4 Screener (LP-29) (Rated 50.31 tons per hour)[95% enclosed] Kiln 1, 2, 3 Screener (LP-35) (Rated 43.13 tons per hour) [95% enclosed] Stackers under (LP-30) (Rated 50.31 tons per hour) Conveyor (LP-34) (Rated 43.13 tons per hour)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

$Compliance\ Demonstration(s)$

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM ₁₀	Active Surface Silt & Moisture Sampling	Quarterly	NA	AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading, Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples

Sampling to be completed:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

Authority for Requirement: DNR Construction Permit 18-A-117-S1

Agency Approved Operation & Maintenance Plan Required?	Yes No No
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: Q-3P

Associated Equipment

Associated Emission Unit ID Numbers: Q-3P

Emissions Control Equipment ID Number: CE WSQ-3P

Emissions Control Equipment Description: Building Enclosure

Raw Material/Fuel: Limestone

Maximum Rated Capacity: 150 Tons per Hour

The following emission units are associated with this emission point:

Table 1: Q-3P Equipment and Pile 9

Emission Unit Description	Rated Capacity*	Control		
Q-03E Crusher	75 tons per hour	None		
Q-03F Belt	75 tons per hour	None		
Q-03G Stacker	50 tons per hour	None		
Q-03H Belt	120 tons per hour	None		
Q-03I Screen WET	120 tons per hour	None		
Q-03J Stacker	120 tons per hour	None		
Q-03B Belt	150 tons per hour	None		
Q-03C Belt	225 tons per hour	None		
O O2D Saman	225 tone man hour	Four sided building or structure		
Q-03D Screen	225 tons per hour	equivalent to 95% enclosure		
Pile 9 (In pit), Maximum Pile Area: 123,623 ft2				

^{*}Maximum Rated Capacity is 150 Tons Per Hour

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Emission Limits (Q-3P Equipment)

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant: Opacity

Emission Limit(s): Fugitive Dust (1)

Authority for Requirement: DNR Construction Permit 02-A-017-S3

567 IAC 23.3(2)"c"

⁽¹⁾ The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Pollutant: PM-10

Emission Limit(s): 21.60 lbs/day

Authority for Requirement: DNR Construction Permit 02-A-017-S3

Emission Limits (Stackers and Pile 9)

The following emission limits shall not be exceeded:

Pollutant: Opacity

Emission Limit(s): Fugitive Dust (2)

The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property (see Plant-Wide Conditions).

Authority for Requirement: DNR Construction Permit 02-A-017-S3

567 IAC 23.3(2)"c"

Pollutant: PM-10

Emission Limit(s): 1.38 lbs/day

Authority for Requirement: DNR Construction Permit 02-A-017-S3

Emission Limits (NSPS 000)

The following emission limits shall not be exceeded for Q-3P equipment:

Pollutant: Opacity

Emission Limit(s): 15 % - Crusher (3)

10 % - Screeners (3)

(3) Limits established per Table 3 of Subpart OOO, Part 60.

Authority for Requirement: DNR Construction Permit 02-A-017-S3

40 CFR 60 Subpart OOO – 567 IAC 23.1(2)"bbb"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall install a four sided building or structure to enclose Q-03D Screen by October 1, 2018. The three sided building or structure shall be equivalent to 95% enclosure of quarry equipment specified in condition 3 of DNR Construction Permit 02-A-017-S3.
 - i. The owner or operator shall maintain a record of the date when construction of 4-side building or structure is completed.
- B. The owner or operator shall develop an operating and maintenance plan for the 4-sided building or structure, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the 4-side building or structure.
- C. The owner or operator shall check for visible emissions from the enclosure on Q-03D Screen once per calendar day at a time while Q-03D Screen is in operation.
 - i. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the enclosure containing Q-03D Screen, the owner or operator shall investigate the emission unit or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Q-03D Screen is not in operation.
- D. The owner or operator shall maintain the total area of Pile 9 to less than or equal to 123,623 square feet.
 - i. The owner or operator shall maintain annual records of Pile 9 area in square feet.
- E. During high wind episodes (greater than 16 miles per hour), if visible emissions are observed from the working face of Pile 9, the owner or operator shall employ measures to eliminate or minimize emissions. Such measures may include applying dust suppressant to working face of the pile or coverings the working face of the pile.
 - i. The owner or operator shall develop a written plan to implement, at a minimum, measures to minimize emissions during high wind episodes as specified in condition E (above). The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.
- F. The owner or operator shall follow requirements per 40 CFR §60.670 through §60.676.

Authority for Requirement: DNR Construction Permit 02-A-017-S3

New Source Performance Standards (NSPS)

The facility (Q-3P equipment) is subject to the New Source Performance Standard (NSPS), Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants. Q-3P equipment are subject to the NSPS Subpart OOO from §60.670 to §60.676.

Authority for Requirement: DNR Construction Permit 02-A-017-S3

40 CFR 60 Subpart A – 567 IAC 23.1(2)

40 CFR 60 Subpart OOO – 567 IAC 23.1(2)"bbb"

Monitoring Requirements	
The owner/operator of this equipment shall comply with the monito	oring requirements listed
below.	
Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EM Engine

Associated Equipment

Associated Emission Unit ID Number: EM Engine

Emission Unit vented through this Emission Point: EM Engine

Emission Unit Description: Kilns Emergency Engine (Model Year: 2016)

Raw Material/Fuel: Natural Gas (Spark Ignition) Rated Capacity: 201 Bhp, .5114 MMBtu/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂) Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NESHAP:

The emergency engine is subject to 40 CFR Part 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(ii) this spark ignition emergency engine, located at a major source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(6), this emergency engine must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ for spark ignition engines. No further requirements apply for this engine under subpart ZZZZ.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

567 IAC 23.1(4)"cz"

NSPS Subpart JJJJ Requirements

Emission Standards:

(40 CFR 60.4233(e) and Table 1 to Subpart JJJJ)

Maximum	Manufactu	Emission Standards (1)						
Engine Power	re Date	g/HP-hr			ppmvd at 15% O ₂			
		NOx	HC + NOx	CO (2)	VOC (3)	NOx	CO	VOC
HP ≥ 130	1/1/2009+	2.0	N/A	4.0	1.0	160	540	86

⁽¹⁾ Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O₂.

Compliance Demonstrations:

- 1. You must demonstrate compliance with the emission standards according to one of following methods (40 CFR 60.4243(b)):
 - a) Purchasing a certified engine that complies with the emission standards, or
 - b) Purchasing a non-certified engine and demonstrating compliance with the emission standards. You must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct performance tests to demonstrate compliance in accordance with 40 CFR 60.4244. Owners and operators are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 4243(b) for additional information.

Maximum Engine Power	Initial Test	Subsequent Test
$25 < HP \le 500$	Required	Not required

- 2. Owners and operators of SI engines that are required to be certified and who operate and maintain the engine according to the manufacturer's written instructions must keep records of required maintenance. 40 CFR 60.4243(b)(1), 4243(a) and 4245(a)(2).
- 3. Owners and operators of natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, a performance test must be conducted to demonstrate compliance with the emission standards. 40 CFR 60.4243(e).
- 4. If you are an owner or operator of engine ≤ 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing, but you are not required to conduct subsequent performance testing unless the engine is rebuilt or undergoes major repair or maintenance. 40 CFR 60.4243(f).
- 5. Owners and operators of certified engines must keep a record from the manufacturer that the engines are certified to meet applicable emission standards. 40 CFR 60.4245(a)(3).

⁽²⁾ See rule for alternative CO certification standards for engines \geq 100 hp and manufactured prior to 1/1/2011.

⁽³⁾ Formaldehyde emissions are not included.

6. Owners and operators of non-certified engines or certified engines operating in a non-certified manner must keep documentation that these engines meet the applicable emission standards. 40 CFR 60.4245(a)(4).

Operating and Recordkeeping Requirements (40 CFR 4243(d))

1. Owners and operators of the following emergency SI engines that do not meet the applicable standards for non-emergency engines must install a non-resettable hour meter. 40 CFR 60.4237.

Maximum Engine	Engine Was Built On Or		
Power	After		
$130 \le HP < 500$	1/1/2011		

- 2. There is no time limit on the use of the emergency engine in emergency situations.
- 3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year.
- 4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing.
- 5. Owners and operators of an emergency engine must keep records of all operation of the engine. The owner must record the date and time of operation of the engine and the reason the engine was in operation.
- 6. Owners and operators of the following emergency SI that does not meet the applicable standards for a non-emergency engine must keep the following records. 40 CFR 60.4245(b).

Maximum Engine Power	Manufactured On Or After	Recordkeeping Requirement
130 ≤ HP < 500	7/1/2011	Hours of operation recorded through a non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

Authority for Requirements: 40 CFR Part 60, Subpart JJJJ

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

- 1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 567 IAC 22.108(9)"a"
- 2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. 567 IAC 22.105 (2)"h"(3)
- 3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. 567 IAC 22.108 (1)"b"
- 4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. 567 IAC 22.108 (14)
- 5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. 567 IAC 22.108 (9)"b"
- 6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. 567 IAC 22.108(15)"c"

G2. Permit Expiration

- 1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). 567 IAC 22.116(2)
- 2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permitting & Standards Branch, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). 567 IAC 22.105

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. 567 IAC 22.107 (4)

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

G6. Annual Fee

- 1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
- 2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
- 3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
- 4. The fee shall be submitted annually by July 1 with forms specified by the department.
- 5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
- 6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
- 7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
- 8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

- 1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- 3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- 4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. 567 IAC 22.108 (15)"b"

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. 567 IAC 22.108 (9)"e"

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

- 1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
- 2. Remedy any cause of excess emissions in an expeditious manner.
- 3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
- 4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. 567 IAC 24.2(1)

G10. Recordkeeping Requirements for Compliance Monitoring

- 1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
 - a. The date, place and time of sampling or measurements
 - b. The date the analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
- 2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
- 3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. 567 IAC 22.108(4), 567 IAC 22.108(12)

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

- 1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
 - a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
 - b. Compliance test methods specified in 567 Chapter 25; or
 - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
- 2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a. Any monitoring or testing methods provided in these rules; or
 - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. 567 IAC 21.5(1)-567 IAC 21.5(2)

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. 567 IAC 22.108(6)

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). 567 IAC Chapter 131-State Only

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the

incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

- a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:
 - i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
 - ii. The estimated quantity of the excess emission.
 - iii. The time and expected duration of the excess emission.
 - iv. The cause of the excess emission.
 - v. The steps being taken to remedy the excess emission.
 - vi. The steps being taken to limit the excess emission in the interim period.
- b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:
 - i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
 - ii. The estimated quantity of the excess emission.
 - iii. The time and duration of the excess emission.
 - iv. The cause of the excess emission.
 - v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

- vi. The steps that were taken to limit the excess emission. vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)
- 3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The facility at the time was being properly operated;
 - c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
 - d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. 567 IAC 22.108(16)

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). 567 IAC 22.108(5)"b"

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. 567 IAC 23.1(2), 567 IAC 23.1(4)

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

- 1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
 - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
 - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
 - d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 22.144(455B));.
 - e. The changes comply with all applicable requirements.
 - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change. 567 IAC 22.110(1)
- 2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. 567 IAC 22.110(2)
- 3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). 567 IAC 22.110(3)
- 4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. 567 IAC 22.110(4)
- 5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. 567 IAC 22.108(11)

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that does any of the following:
 - i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source:
 - iii. Require more frequent monitoring or reporting by the permittee; or
 - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

- a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
 - i. Do not violate any applicable requirement;
 - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
 - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
 - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
 - v. Are not modifications under any provision of Title I of the Act; and vi. Are not required to be processed as significant modification under rule 567 22.113(455B).
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
 - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
 - ii. The permittee's suggested draft permit;
 - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.111-567 IAC 22.113

G19. Duty to Obtain Construction Permits

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. 567 IAC 22.1(1)

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (567 IAC 23.1(3)"a"); training fires and controlled burning of a demolished building (567 IAC 23.2).

G21. Open Burning

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. 567 IAC 23.2 <u>except</u> 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable

emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7) **G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements**

- 1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
 - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
- 2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
- 3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
- 5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives

Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. 40 CFR part 82

G24. Permit Reopenings

- 1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. 567 IAC 22.108(9)"c"
- 2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is <u>not</u> required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is <u>not</u> required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
 - c. Reopening and revision on this ground is <u>not</u> required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. 567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"
- 3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination; b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. 567 IAC 22.114(1)
- 4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. 567 IAC 22.114(2)

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. 567 IAC 22.114(3)

G25. Permit Shield

- 1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
 - a. Such applicable requirements are included and are specifically identified in the permit; or
 - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
- 2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
- 3. A permit shield shall not alter or affect the following:
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
 - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. 567 IAC 22.108 (18)

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. 567 *IAC* 22.108 (8)

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. 567 IAC 22.108 (9)"d" **G28. Transferability**

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of 567 IAC 22.111(1). 567 IAC 22.111(1)"d"

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. 567 IAC 22.3(3)"c"

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification
The permittee shall notify the department's stack test contact in writing not less than 30 days
before a required test or performance evaluation of a continuous emission monitor is performed
to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition.
Such notice shall include the time, the place, the name of the person who will conduct the test
and other information as required by the department. If the owner or operator does not provide
timely notice to the department, the department shall not consider the test results or performance
evaluation results to be a valid demonstration of compliance with applicable rules or permit
conditions. Upon written request, the department may allow a notification period of less than 30

days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator Iowa DNR, Air Quality Bureau Wallace State Office Building 502 E 9th St.
Des Moines, IA 50319-0034 (515) 725-9526

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program. 567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. 567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Iowa Compliance Officer

Air Branch

Enforcement and Compliance Assurance Division

11201 Renner Blvd.

Lenexa, KS 66219

(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau Iowa Department of Natural Resources Wallace State Office Building 502 E 9th St. Des Moines, IA 50319-0034 (515) 725-0268 Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

909 West Main – Suite 4 Manchester, IA 52057 (563) 927-2640

Field Office 3

1900 N. Grand Ave. Spencer, IA 51301 (712) 262-4177

Field Office 5

Wallace State Office Building 502 E 9th St. Des Moines, IA 50319-0034 (515) 725-0268

Polk County Public Works Dept.

Air Quality Division 5885 NE 14th St. Des Moines, IA 50313 (515) 286-3351

Field Office 2

2300-15th St., SW Mason City, IA 50401 (641) 424-4073

Field Office 4

1401 Sunnyside Lane Atlantic, IA 50022 (712) 243-1934

Field Office 6

1023 West Madison Street Washington, IA 52353-1623 (319) 653-2135

Linn County Public Health

Air Quality Branch 501 13th St., NW Cedar Rapids, IA 52405 (319) 892-6000

Appendix A: Administrative Consent Order NO. 98-AQ-7

(Double-click on the PDF document to open)

IOWA DEPARTMENT OF NATURAL RESOURCES ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:

ADMINISTRATIVE CONSENT ORDER.

LEVWOOD MENING & MINERALS CORP.

NO. 98-AQ-7

TO: Linwood Mining & Minerals Corp.
c/c Robert Niemela
General Manager, Operations
401 East Profit Street
Davenbort, Iowa 52304

Linwood Mining & Minerals Corpc/o John L. Bush. Registered Agent 4321 E. 60th Street Davenport, Iowa 52804

1 SUMMARY

This Administrative Consect Order is entered into between the Iowa Department of Natural Resources (DNR) and Linwood Mining & Minerals Corporation (Linwood) for the purpose of resolving PM-10 National America Art Quality Violations monitored in Burfalet, Iowa. This Administrative Consent Order supertedes and replaces Administrative Order No. 97-AC-10, which was issued on May 30, 1997.

Any miestions regarding this order should be directed to.

Relating to technical requirements:

Dong Campbel: Lowa Department of Natural Resources 7900 Hinkman Road, Suite 1 Des Moines, Jowa 90322

PM: 315/281-8930

Relating to appeal rights:

Anne Proziosi Iowa Department of Natural Resources 7900 Hickman Rose, Suite I Des Moines, Iowa 50323 Ph: 515/28146246

II. STATEMENT OF FACTS

1. DNR has monitored three exceedences of the 24-hour PM-10 National Ambient Air Quality Standard. On October 15, 1995, a DNR monitoring site located at 11100-110th Avenue in Buffalo, Iowa, recorded a PM-10 concentration of 156.5 micrograms per tubic motor (ng/m²), and on August 23, 1995, the same monitor recorded

JHW 143 04-TV-005R2, 9/3/2019

Appendix B: Compliance Assurance Monitoring (CAM) Plans